

Eaton 9SX UPS

Power protection that takes you to the Edge and beyond

Combining reliable double-conversion topology, internal static bypass and an easy-to-read LCD menu display, the Eaton 9SX UPS provides the highly efficient and reliable power you expect from a 9-series UPS in a convenient and compact tower.



Build a complete solution

Eaton offers a full suite of power management solutions to make your IT environment more efficient.

Intelligent power

Manage and monitor your 9SX UPS with Intelligent Power Manager. Plus it's integrated seamlessly with several Eaton alliance partners like Nutanix, Cisco and Lenovo.



Cybersecurity

Reduce your cybersecurity risk with the Gigabit Network Card, the first UPS connectivity device to meet the UL 2900-2-2 cybersecurity standard.



Network monitoring

The Eaton Relay Card-Mini Slot offers direct communication with UPS systems and any relay-connected computer with automatic shutdowns providing protection to your equipment.



Competitive comparison

Eaton 9SX UPS 1440VA, 120V

What products compete with the 9SX UPS?

APC Smart-UPS RT

CyberPower CP Smart App Online

Tripp Lite SmartOnline

Vertiv Liebert GXT4



How does this UPS compare with the competition?

Compatible with cybersecurity Gigabit Network Card: Network-M2

Save space: Compact tower

Efficiency: up to 97% efficient in high efficiency mode at full load

Environmental Monitoring Probe (EMP): EMPDT1H1C2

Is the 9SX better than the 9130? YES

- ✓ Updated with easy-to-read LCD menu display
- ✓ Newer components
- ✓ Compatible with the newest connectivity devices

Is it reliable? YES

- ✓ Heightened cybersecurity with the UL 2900-2-2 compliant Gigabit Network Card (optional)
- ✓ Hot-swappable batteries = avoiding downtime for battery maintenance

Is Eaton's product the best choice? YES

- ✓ ABM technology increases battery service life by 50 percent



Powering Business Worldwide

Learn more at [Eaton.com/9SX](https://www.eaton.com/9SX)

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Eaton 9SX UPS

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GADGETS / GAMES / GEAR



POWER
UPS

APPS

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HUNGRY?**

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Wi-Fi on during
blackouts

**OFF
GRID**

How do you
go about
it?

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the perfect
generator

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HOW TO:

Inverters demystified
Cook without electricity
Entertain the family in the dark

PLUS:

Audi A1 Sportback
Olympus OM-D E-M5
Philips OneBlade
Samsung S20 Ultra
Toyota GR Supra

SAMSUNG

**The phone that will
change photography**



Galaxy S20 Series

Galaxy S20 | S20+ | S20 Ultra

100X^{*} Space Zoom

Zoom in 100x to find shots you never knew existed

It starts with 10x Hybrid Optic Zoom enabled by a revolutionary folded lens and high resolution image sensor. Couple that with Super Resolution Zoom enhanced by camera AI to get close up to the action and capture moments you might have missed.

*30x Super Resolution Zoom available on the S20 and S20+. 100x Super Resolution Zoom available on the S20 Ultra.

8K Video Snap

Changes how you capture photos and videos



You can pull 33MP stills right out of 8K video

It's a whole new way to capture still photography every time you hit record. 8K video turns every frame into a crisp image that you can pinch in on for once-in-a-lifetime shots.



Bright Night

We almost tripled the sensor size so you can shoot more of the night

In low light, the pro-grade camera system lets you capture multiple action shots at once, merging them into one stunning shot with less blur and noise. With larger image sensors and AI, switching to Night mode means you can shoot night-time scenes like daylight.



Single Take

A whole new way to take one shot and turn it into multiple formats

Single Take is essentially burst mode turned beast mode. With revolutionary AI, it lets you shoot for up to 10 seconds and get back a variety of formats - meaning you can choose the best style for the moment without having to reshoot.

Specifications are subject to change, correct at time of print.

WELCOME

It's better to light a candle than to curse the darkness. That's an old saying, one that I mostly associate with Terry Pratchett, but it's an appropriate one in 2020 in South Africa. Load shedding is a reality of life and it'll remain so for at least another year. Quite probably considerably longer. We could lament the fact or rant about the circumstances that brought load shedding about but the reality is that the situation isn't going to change. Some of the folks responsible may face some sort of justice but that really doesn't matter to the vast majority of the country.

That's the darkness and we can curse it if we like but it's far better to light a candle.

And that candle is both literal and figurative. We've got a number of ways for you to light a candle in this special load shedding issue of *Stuff*, be it going off-grid (p64), choosing the right generator for your needs (p36), selecting essential tech for surviving longer outages (p52) or how to keep yourself amused without electricity (p58). There's also a literal candle (p104).

But this is still *Stuff*, even if it's awfully dark outside, and so we've got all the usual suspects. Samsung's new Galaxy S20 Ultra is unveiled (p8), while we've got tests of everything from the new Audi A1 Sportback (p80) to Canon's excellent new EOS 90D (p82). There are more cameras and cars, hybrid tablets, portable speakers and games to look forward to as well, plus all of our regularly scheduled programming.

Sometimes it feels good to curse the darkness but it's always a better idea to spend time in the light. And, with this issue, we've got ways for you to make your own light.

Even when the country isn't exactly keen on allowing that. **S**

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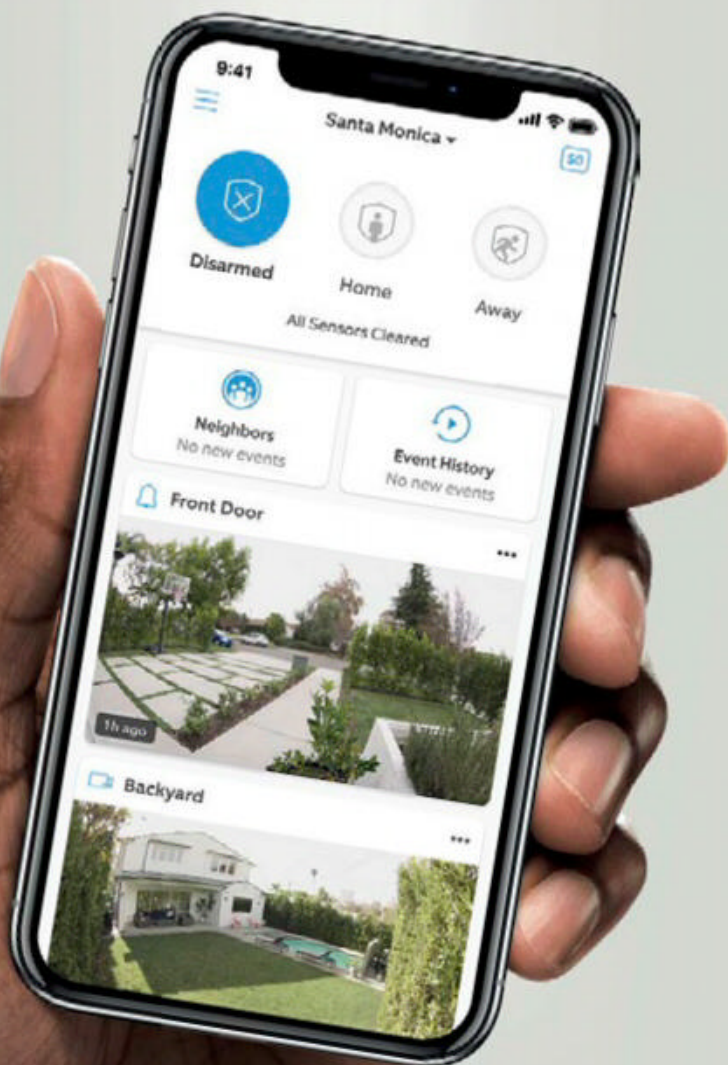
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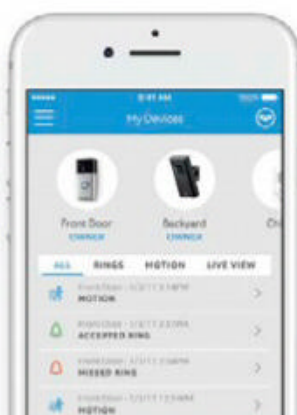
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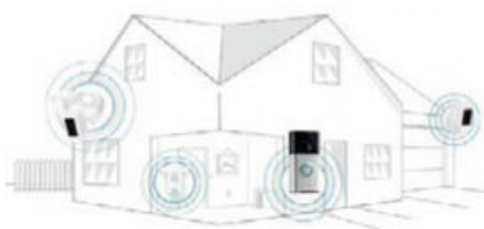
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Ring's customisable motion sensors let you focus-in on the most important areas of your home. You'll get instant alerts as soon as Ring detects motion, so you'll always be the first to know when anyone steps foot on your property.



A Ring of Security Around Your Home

Ring lets you monitor every corner of your property. With a Video Doorbell at your door and Ring Cameras around the house, you can create a Ring of Security around your entire home.



Solar panel

for Doorbell 2 and
Spotlight Camera Battery

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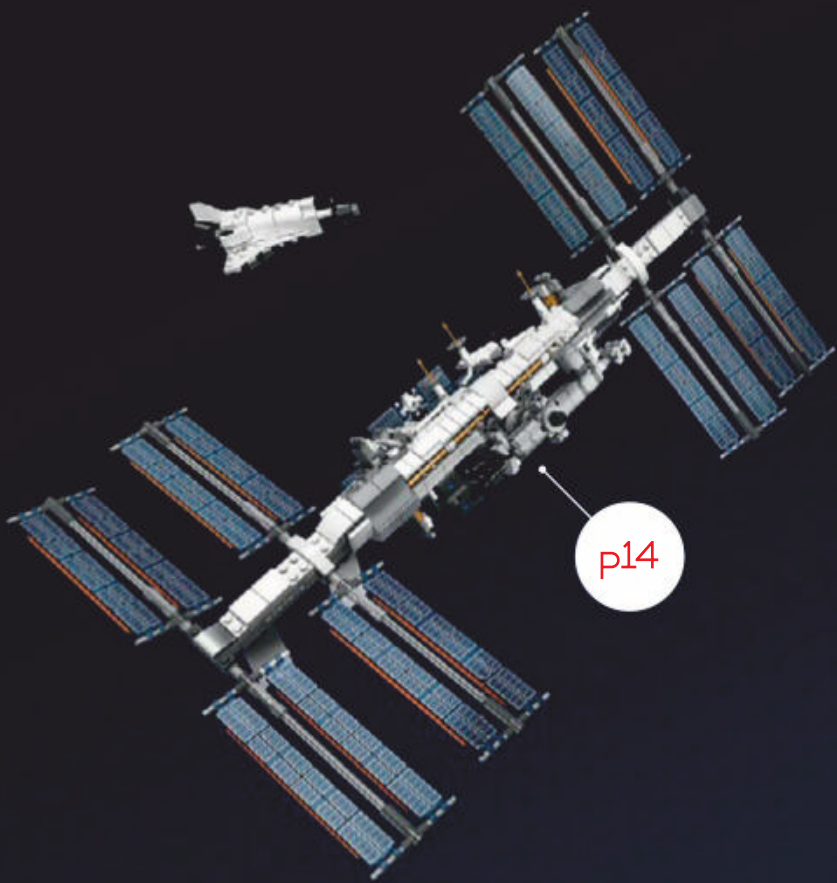
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**SUBS
OFFER**



**GET
30%
OFF**

**AND FREE
DELIVERY**

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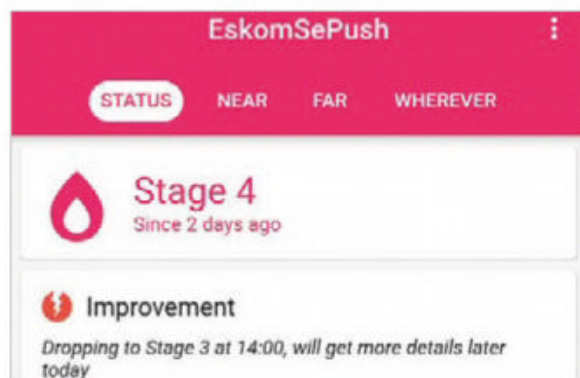


I GAVE MY SCHEDULE A PUSH

For a long time, the most popular app in South Africa has been WhatsApp. I wager that it is now the amusingly named

EskomSePush. I'm quite sure – like most of my friends and I – call it by the original P word. It has not only captured the zeitgeist of the country right now, as we deal with load-shedding (I believe my phrase is more accurate) but is the best source of info of when the darkness will strike. Put in your suburb and the app lets you know when you're going to be load-shat. Alerts warn of general stages and suspensions too. The developers have made finding info about this disruptive pain that much easier.

Toby Shapshak, Publisher and Editor-in-chief



I WAS CHARGED WITH BATTERIES

I've got a few solutions to load shedding at home, but I'm not especially big on generators (and maintaining them). Instead,

there are a whole lot of batteries doing things, from operating lights (those are automatic) to showing me around the house (those are manual). I've got options to keep the rather spoilt cat's water fountain going, ways to quickly top up a smartphone or games console, and even options to keep the fan running – all using rechargeable batteries. Okay, okay, and I use a gas bottle and a Thermos as well. Whatever Eskom is saving during load shedding, I reckon I'm denting it when the power comes back on.

Brett Venter, Editor



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South Africa



OUR MONTH

What this issue has brought us by way of geekery



I WAS LATE TO THE WAR, AGAIN

Just like South Africans in World War II, I was late to the *Warzone*. Activision dropped a bomb(shell) with the unexpected release of

its *Modern Warfare* standalone battle royale mode this month. There I was, minding my own business, a clear plan structured in my mind, concerning scheduling the download after work. Then, suddenly, an oceanwater pump at Koeberg nuclear power station decided to throw a spanner in my plans. BOOM, Stage 4 load shedding. You know what that means? Half of SA couldn't battle to the death in the first good *COD* battle royal game. Just like WWII.

Marcé Bester, Deputy Editor



I WAS CONSIDERATE WITH MY POWER

Having a large family and three Airbnb cottages, a solution for the dreaded load shedding was a requirement. We invested in a 50kVa diesel generator to run the entire property. However, it guzzles huge amounts of fuel. That said, it is a huge lifesaver, keeping residents and the family happy during shedding. We do try keep the run time down to a bare minimum i.e. we will only put it on when it's dark. Since it growls rather loudly, we try not to upset the neighbours unnecessarily and also turn it off at 22:00. That lets guests hit the sack early and have a good night's rest.

Sally Hudson, Business Manager



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H O T S T

Deep impact

The front and back of the Ultra are both curvy Gorilla Glass 6. Maker Corning says this is twice as tough as Gorilla Glass 5, tested with 15 drops from 1m onto rough surfaces.

Warp speed

The most advanced OLED ever seen in a Samsung, this 6.9in display updates 120 times a second, and the touchscreen registers your inputs 240 times a second.

U

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F

22 PAGES
OF THE BIGGEST
STORIES FROM
PLANET TECHHOT
FOUR
#1

WE'VE LOST OUR HEARTS TO A STARSHIP SNOOPER

Samsung Galaxy S20 Ultra

Time to meet the first Samsung phone of 2020, so packed with tech it might start seeping out of the SIM tray. The Galaxy S20 Ultra introduces Space Zoom, which lets you focus in 100x closer to your subject. Want to check the moon for the flag Neil Armstrong (supposedly) left there in 1969, or how your neighbour's innocent shrubs are going? Sorted. This is also the first phone to shoot 8K video – and it's not often we use mobiles that could give your 4K OLED TV a complex.

These specs are part of the Ultra's quad rear camera array – made up of a 108MP

primary sensor, 48MP telephoto with 10x "hybrid optical" zoom, 12MP ultra-wide and ToF depth sensor. And the photo boasts don't end there. The new Bright Night mode promises "ridiculous" low-light skills, mixing 30 frames using a clever algorithm.

And the other bits? You get a 6.9in 120Hz OLED screen, up to 512GB storage, a new Exynos 990 processor with 25% more graphics power, 5G data and a plus-size 5000mAh battery.

As hot as...the surface of Venus (a balmy 462°C last time we checked)

R27 000 / samsung.com/za

Flash hoardin'

Single Take mode uses all the Ultra's cameras at once, snapping stills and videos with different fields of view and filters. Then you just pick the ones you want to keep.

THE FRAME-US FIVE

1

ToF DEPTH SENSOR

The 'time of flight' camera uses both infrared and a VGA image sensor to make a depth map of the world before you in real time. It makes your background-blurred portraits more realistic and has stacks of potential for AR. A very impressive bit of tech.

2

108MP PRIMARY

Let's check the watch... yep, this is the highest-res camera you can get in a phone right now, clocking in at 108MP. Seems excessive, but in bad lighting the pixels gang up in teams of nine so you don't end up with a hundred million pixels' worth of noise.

3

12MP ULTRA-WIDE

This phone is also an action camera. There's a 120° lens for wide-angle stills and video. Good news: it doubles the effectiveness of the Super Steady stabilisation video mode. Bad news: it will make the most extreme BMX routes you've tackled look easy.

4

48MP SPACE ZOOM

Thanks to a liberal sprinkle of algorithm-assisted digital zoom, the S20 Ultra can shoot at up to 100x magnification, double the maximum of the Huawei P30 Pro. If that ends up looking like scrambled eggs, you can use the more tasteful 10x hybrid optical mode.

5

40MP FRONT

The front camera kicks the Ultra's total megapixel count up to 208. Samsung hasn't gone for any motorised selfie madness here, just a punch-hole, but it does tie together groups of four pixels in low light to ensure clear selfies when the bar is closing.

**Use the force**

You can have wireless charging if you want...but the 25W wired charger gets that 5000mAh battery to 50% in half an hour. And the optional 45W charger hits 68% in the same time.

5

Inner space

The hybrid SIM slot lets you use either two SIMs or one plus a microSD card of up to 1TB. Make it a work phone you don't hate, or a micro PC with more space than your laptop.

First contact

Samsung has tweaked the in-screen fingerprint scanner. It's now higher up for comfier ergonomics and the internal tech has been improved to make it faster and more reliable.

Pod knows it's true

At 20cm tall and 16.5cm across, the Sound X is a little bit bigger than the HomePod.

And like Apple's smart speaker, it has a circular touch-panel on the top.

HOT
FOUR
#2

THE DEVIALET'S IN THE DETAILS

Huawei Sound X

Despite what Donald Trump might think, Huawei makes excellent phones. Unlike the big orange baby, Huawei knows it's not an expert in everything, which is why it gets Leica in to work on its cameras rather than just getting someone in accounts have a go. Likewise, when it came to making the Sound X smart speaker, Huawei was straight on the phone to Devialet, the hi-fi boffins behind the excellent Phantom all-in-one speaker.

Together they've produced this HomePod-esque effort, which promises 360° sound from a pair of 3.5in woofers and half a dozen 1.5in full-range drivers, with six microphones

on board for picking up your voice commands.

With some US companies banned from working with Huawei, that raises one key question: who supplies the smarts? It's one that'll need to be answered before the Sound X is to have any chance of succeeding outside China, which is probably why there's no SA availability info yet.

In China this speaker will cost the equivalent of about R4 300, whereas the Phantom costs R20 000 – so thankfully it seems Huawei didn't ask Devialet for help when it came to concocting the price. Phew.

As hot as... the Donald's temper
Rtba / consumer.huawei.com

Pairsty similitude

As with many wireless and smart speakers, you can add a second Sound X to your setup to create a stereo pair. In fact, Huawei will offer a bundle of two for this very reason.

I do want control of you

The Sound X uses Huawei's Xiaoyi voice assistant, but that's no use if you don't speak Chinese. It'll also work with the HiLink smart home system and support hi-res audio.



HOT
FOUR
#3

QUAD IS A DANCER

Oppo A5 2020

How much of an iPhone 11 do you reckon R4 500 would get you? Just the camera module? The screen? A shell without any of the actual pieces inside? You certainly wouldn't be walking out of an Apple Store with the whole thing in your pocket. Hand about the same amount of cash to Oppo, though, and they'll happily exchange it for an entire A5 2020, with all the bits inside and everything.

That means an octa-core Snapdragon 665 processor, 4GB of RAM, 64GB of storage and a hefty 5000mAh battery. It's all sandwiched between a 6.5in display with teardrop notch (for an 8MP selfie-cam) on the front and a versatile four-camera setup on the back. That's made up of a regular 12MP snapper, an 8MP ultra-wide 119° lens, and a pair of 2MP sensors: one for depth and a mono one to boost detail.

Of course, there are compromises: the chassis is plastic, the screen is only 720p, and those four cameras can't hope to compete with fewer-lensed but pricier alternatives; but if you don't have the cash to splash on a flagship, the A5 2020 will at least make you look like a semi-pro nerd.

As hot as... an iPhone shell filled with molten cheese

[Rtba / takealot.com](https://www.takealot.com)

ISS club party

This mini ISS has been released to mark two separate occasions: the 20th birthday of the space station itself, and 10 years of the collaborative Lego Ideas project.

**HOT
FOUR
#4**

**METEOR
MAKER****Lego Ideas International
Space Station**

In 2012, two Canadian teenagers used a weather balloon to send a Lego man into space (well, the stratosphere, but it's close enough for us). Eight years later, the Danish brick merchant has finally released something suitable for the pair to launch up there and join him.

With 864 pieces, this version of the ISS is a little more manageable than the real thing, which remains the largest spacecraft ever built – try finding room on a shelf for that.

That's not to say this kit doesn't require some skills to put together, though. When completed it's 31cm long, with a poseable robotic arm, two rotating joints and eight adjustable solar panels. There are also three mini cargo ships and a dockable shuttle, although that's not big enough for the two included microfigures, so you'll just have to make do with dropping off a crew of imaginary astronauts.

Lego has included a display stand, but we all know there's only one place this plastic ISS is going: 80,000 feet up to meet that diminutive Canadian Major Tom. At least, it would be if his balloon hadn't popped and sent him plunging back down to earth...

As hot as... space curry
R1250 / greatyellowbrick.co.za

Cost in space

At a cost of over \$120bn, the ISS is said to be the most expensive object ever built, which makes the Lego version's R1250 asking price seem like a bit of a bargain.

NOKIA

48 MP camera with ZEISS Optics.

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Nokia 7.2



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CALL OF DUTY: MODERN WARDROBE

Samsung AirDresser

R40 000 (import) / samsung.com

Describing something as 'the most interesting wardrobe we've ever seen' doesn't sound like much. But when Samsung's AirDresser wants to do our laundry for us...

● Killing in the name of

As much as we enjoy strolling out of the house smelling of flowery detergent, Samsung's latest smart home invention is designed to reduce trips to the washing machine. The AirDresser is a wardrobe that uses jets of air to loosen and remove ingrained dust from your favourite garments, while a jet of steam kills bacteria and heat dries everything slowly.

● A delicate subject

Samsung isn't saying throw out your washing machine, but fewer washes means less stress on fabrics, prolonging the life of your clothes. Suits, coats, wool, down, leather, denim, babywear, bedding and toys – it's all good here, and a Wrinkle Care system will even smooth out creases.

● Goodbye, Axe Adrenaline

Clothes are culprits for gathering germs, but they can smell as well. So a deodorising filter eradicates stubborn smells that build up over time. And when the door is open, the AirDresser also doubles as a dehumidifier.

● Fix up, look sharp

After every 40 cycles it will remember it needs to freshen up and enter self-cleaning mode, where heat, air and steam deal with any germs and odours within the wardrobe itself.

● Sound LCD system

The door design incorporates a Crystal Mirror LCD touchscreen panel display for controlling cycles while you check out that reflection of yo' fine self. It's a soft-closing door too, meaning no loud slamming or trapping of fingers as you perfect 'Blue Steel'.

Like all of Samsung's IoT devices, it can be connected to the SmartThings app.





STEAM SPIRIT

● LG TrueSteam Washing Machine

This uses steam to remove allergens, reduce wrinkles and soften clothes. The 6 Motion feature moves the drum in six ways to clean certain fabrics.

R16 650 (import) / lg.com

● Philips Comfort Touch Plus Garment Steamer

Removes odours, kills bacteria, smooths wrinkles and refreshes clothes with your favourite scents. No word on whether that includes Brut 33.

R3 200 (import) / philips.com

● Tefal IXEO Iron & Steamer Smart Board

Tefal's featherweight all-in-one iron and steamer uses 1600W of power for wrinkle removal (not those wrinkles, Gramps). It'll heat up in 45 seconds.

R4 600 (import) / tefal.com

JETS OF AIR
REMOVE THE
DUST WHILE
STEAM KILLS
BACTERIA



Wax lyrical PHILIPS ST702

Gym types with questionable personal hygiene – the UV clean feature on Philips' true wireless sports earphones is for you. Slide the buds into a charging case resembling the cryo-can from *Jurassic Park*, and 20 seconds later a sunbed session of ultraviolet rays has disinfected each bud, clearing them of bacterial nasties. Offering 18 hours' play time, fast charging, tap controls, voice assistant support and Bluetooth 5.0, the ST702s are no substitute for cotton buds, but do form part of an impressive new Philips Sports collection. That includes the SN503 wireless in-ears with the world's smallest heart-rate sensor... but those ones you'll have to clean yourself.

Rtba / tarsus.co.za



Snappy presser FUJIFILM X-T200

It can't make phone calls, and frankly you'd look ridiculous if it did, but the X-T200 is a mega mirrorless camera that will take better photos than most smartphones. This beginner-friendly snapper with a 24.2MP CMOS sensor rocks a 2.5in vari-angle touchscreen, speedy face-detection and the ability to shoot 4K at 20fps. That's a step up from the X-T100, which was limited to 15fps, and it processes data 3.5 times faster, boosting continuous shooting speeds to 8fps. It's got all of our favourite film-simulation modes, plus on-sensor phase detection to help keep fast-moving subjects in focus. But just to be clear, you'll still need a phone.

R11 300 (body only) / fujifilm.co.za

OMEGA SEAMASTER 300M 007 EDITION

from R150 000 / omegawatches.com

That's a fancy watch. But what makes it different from other fancy watches?

It's James Bond's for a start. At least, this is the Omega model he'll be wearing in 007's next outing, *No Time to Die*. It's also the first ever Seamaster to get a grade-2 titanium mesh bracelet, and in the world of expensive wristwear these are the kind of intricacies that make a watch sought-after.

No Time to Die? Sounds like Bond's watch is running fast.

I'm sure the engineers at Omega would beg to differ. The 42mm 300M 007 Edition is powered by a magnetically resistant co-axial master chronometer calibre 8806 movement, and in horological terms that should mean Bond's watch is pretty darned accurate.

Cheers, Q. But can it cut through rope, defuse a bomb or mix a vodka martini?

Sadly not, but it does have a serious legacy behind it. The Seamaster range was launched in 1948 and every iteration is linked to the original CK2129 military-issue model beloved by the Royal Navy. Daniel Craig also helped with the design of this one, which is slimmer and lighter than most models; and if you don't care for the mesh bracelet there's a Nato strap with a 007-engraved loop instead.

Any more 007 trivia?

The case back has engraved reference points. So '0552' is the code for Navy personnel and '923 7697' is for a diver's watch. The letter 'A' signifies a watch with a screw-in crown. Obviously '007' refers to Bond's agent number, and '62' is the year of the very first James Bond film, *Dr No*. The watch has already launched, even if Bond himself is late to the party this year. *No Time to Die* is expected to hit cinemas in November.



DANIEL
CRAIG
HELPED
WITH THE
DESIGN,
WHICH IS
SLIMMER
THAN MOST
MODELS



Nurvv performance NURVV

Nurvv has got your back... plus your ankles and feet, by detecting poor running habits before you go and injure yourself. Through its connected insoles, which pair with an app, it uses 32 sensors to ascertain a 'running health' score based on training load, pronation, cadence and balance, capturing data 1000 times per second. It provides coaching while on the run to keep you motivated, and pointers on stride length and pace. The insoles can stand rain, mud and puddles, so there's nothing stopping you from an off-pavement session – plus the battery life of five hours will see you through most runs. Each pack provides two insoles, two GPS trackers and access to the app.

R4 900 (import) / nurvv.com



Help me, doctor beat POLAR H9

If you're serious about proving you're not a vampire, you might find that the so-so heart-rate sensor squashed into your smart watch doesn't cut it for accuracy. That's where dedicated monitors like the Polar H9 come in. A premium heart-rate chest-strap that won't break the bank, it aims to deliver instant thumpiness readouts alongside accurate calorie-burn data, and can hold enough juice for the exhausting prospect of 400 hours in the gym. That means the battery should last for around a year if you train an hour a day, which doesn't sound much better. Bluetooth and ANT+ tech make syncing the strap a breeze, so you won't miss a beat.

R1000 / probikekit.co.za



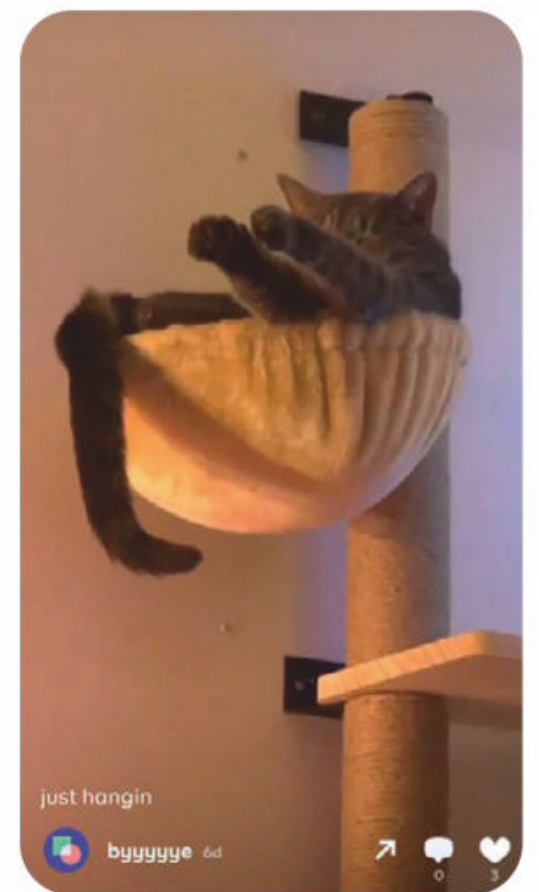
↓ DROP EVERYTHING & DOWNLOAD

Byte Free / Android, iOS

Remember Vine? Without its six-second video loops the world might never have been introduced to the haunting Duck Army, Limmy's Frosty Jack's series, or this shocking revelation about what really powers Tesla's Model S. When are you going to come clean, Elon?

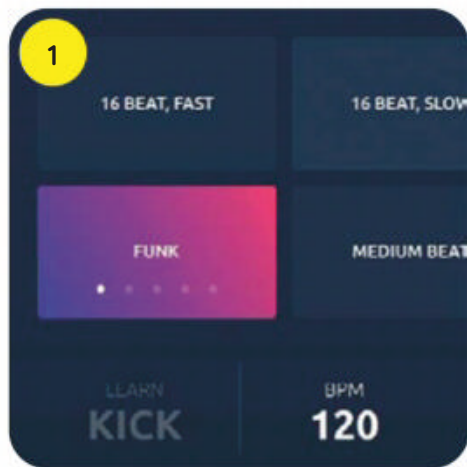
Vine shut down in 2017, but its co-creator has spent the past couple of years working on Byte, hoping it'll challenge TikTok as the go-to place for short, quirky videos. It's just a pity the name sounds like a TV show about tech aimed at pensioners.

Rebyting is like retweeting, so you can amplify the clips you like most, and it keeps the old tap-to-record mechanic. That makes creating your masterpiece simple, which was always Vine's greatest strength.



↓ APPS

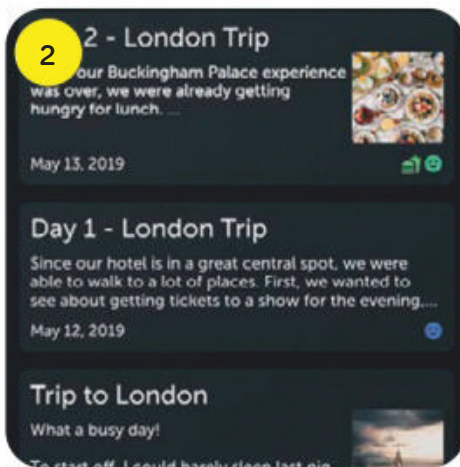
This month's mobile must-downloads



1 Beats and Loops

R61 / Android, iOS

Like a set of virtual guitar pedals, this app has you swing your foot above the screen to trigger beats and record loops. Just don't forget you're not using an actual pedal and stamp on your phone.



2 Miary

Free (IAPs) / Android, iOS

Almost the flip of Moodflow, this app combines mood-tracking and journalling but focuses on the latter. So as you jot down events, you add mood icons for each one that can later be tracked and perused.



3 Recordart

R17 / Android

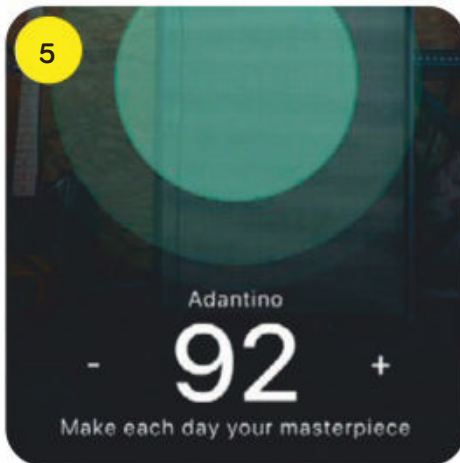
Like vinyl's artistry? Find it tricky to lug an actual record deck around? Then try this app, which sticks a spinning disc of joy – complete with art – on your home screen, updating as tracks change.



4 Lego Building Instructions

Free / Android, iOS

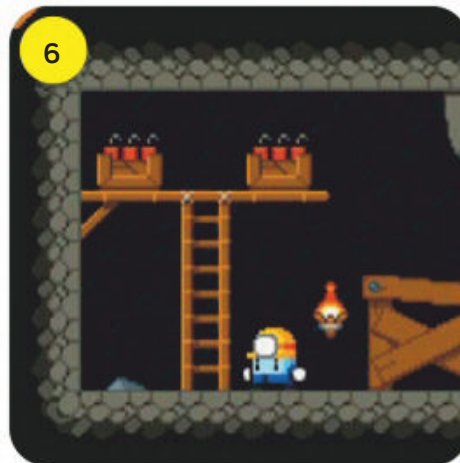
Disaster! You made that amazing new Lego kit, but someone dropped it and your manuals are nowhere to be seen. Turn your plastic parts into model joy again with this app's help.



5 Hey Metronome

R30 / iOS

Instead of "Hey Siri", you can bellow "Hey Metronome" at this app to adjust tempo, time signature and sounds. Great stuff when you're furiously strumming away at your instrument and don't want to stop.



6 Mineblast!!

Free / Android, iOS

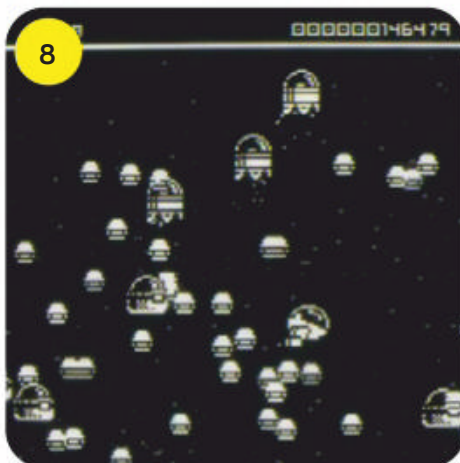
You're stuck in a mine. Bugger. Luckily there's loads of dynamite lying around, and you can blast bits of scenery to make bridges and inch your way to freedom. Just avoid the psychotic wildlife.



7 Dragon Ball Legends

Free / Android, iOS

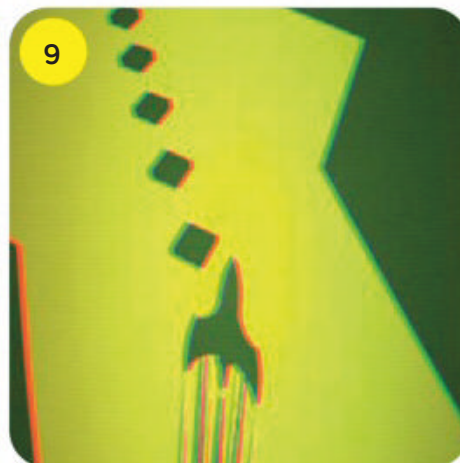
Blending Namco's signature action with the addictive nature of a trading card game has never been this exciting. Relive the SABC 2 heyday on your phone but be warned – *Legends* is a data hog.



8 Cecconoid

R43 / Android, iOS

Some of us here still get *Cybernoid* flashbacks. This tribute echoes the 8-bit original's visuals and punishing gameplay as you blast evil enemies to bits. Not enough destruction? Try the *Robotron*-style extra.



9 Star Jolt

Free / Android, iOS

Flappy Bird's heart meets visuals inspired by ancient arcade games. Blaze through a tunnel, avoid the sides, and munch dots. Games last mere seconds – and it's infuriatingly compelling.

IN THE SPOTLIGHT

AI DUNGEON

AI DUNGEON

Free /

Android, iOS

We've seen algorithmically generated endless runners, but what about an endless text adventure?

That's *AI Dungeon*, more or less – and it comes across like a group of drunk coders and writers live-creating a sequel to *Zork* as you play.

It's baffling and brilliant. With an AI trained by reading the internet, it's never short of responses to your inputs; but it flirts with incoherence, frequently upending the entire story on a whim.

That can be frustrating, but as an insight into the future of generative storytelling, *AI Dungeon* is dreamlike and fascinating.





LGVTQ 5G

LG V50 THINQ

As much as it seems everyone is hyped about implementing 5G in SA, we're nowhere near countrywide access yet. But 5G phones have started rolling in. LG's V50 ThinQ is by far the largest, most bombastic device by the company yet, and it's one of the first in SA toting the 5G label. We're not convinced that's a real advantage though. Not yet. The V50's specs are powerful enough, with a Snapdragon 855 chipset and 6GB of RAM. Unfortunately, it runs Android 9.0 Pie out of the box. Oh well, at least it's got 128GB of storage as well as a microSD slot for you to add another 2TB. If you wanna.

R15 000 / lg.com/za

Suck it, load shedding

PHILIPS SPEEDPRO AQUA MAX

Cords restrict our ability to move freely. This is especially true when it comes to menial chores and cleaning. We need more tech like the Philips Floor Care SpeedPro Max Aqua – a cordless vacuum cleaner that lasts up to one hour on a charge. It takes three to four hours to juice up the battery, during which time you can play with the variety of attachments in the box. Included are a standard vacuum attachment for floors, a mop option and an attachment for couches and chairs, which works to pick up even the slightest cat hair. This is tried and tested on real cats, obvs.

R10 000 / philips.co.za



Git gud speedrun

SUUNTO 7

Suunto wants to help you get fit. The Suunto 7 is the company's first Wear OS-powered device, taking the sports-focused watch we're used to and bringing some Google smarts to the party. This gives you instant access to onboard maps and routing, music streaming services, and even contactless payments using G Pay. Too bad Pay doesn't work here. The Suunto 7 comes in a wide range of colour variations and boasts a new 'bigger' battery. Initial testing shows that it only lasts, like, a day and a half on a charge without GPS tracking enabled, which is slightly lacklustre. But it looks hella good.

R8 000 / ultimo.co.za/suunto



OUT
20 MAR

FIRST PLAY DOOM ETERNAL

PS4, XB1, Switch, Stadia, PC

Fast, gory, deafeningly loud and unapologetically old-school, 2016's *Doom* reboot was a demon-breath of fresh air. Anyone who enjoyed creatively slaughtering evil things in the last game will be happy to learn there are twice as many this time, plus a host of new weapons to shoot them with.

You're almost certainly not coming to *Doom Eternal* for a compelling narrative, but the basics are that the diabolical forces of Hell have moved on from Mars and are now invading Earth. Once again you step into

the scum-stomping boots of the voiceless Slayer, as you begin a cross-dimensional mission to save humanity.

It's definitely *Doom*, and it thinks other FPS games are wimps. Crouching? Cover? Regenerating health? Standing still for even half a second? Bah, babyish ideas. No, this is all about constant movement and getting right up in the deformed faces of your enemies.

New is the Flame Belch, a flamethrower that allows you to BBQ the demon onslaught. Doing this gets you additional

armour shards – essential for taking on the bigger beasts, many of which have weak points that you'll need to target before finishing them off.

Keep moving, keep killing, and *Doom Eternal* transforms into a grotesque but satisfying ballet of combat. It doesn't look or feel drastically different to 2016's triumphant return... but when there's nothing else quite like it, that hardly matters.

More Glory Kills, better weapons and new moves are enough to make this feel like a worthy sequel.



FIRST LOOK THE ZOMBIES: THIS WILL BE OUR YEAR



RESIDENT EVIL 3

PS4, XB1, PC

The *RE2* remake was one of 2019's best games, taking the beloved survival horror classic and amplifying every inch of it using modern tech and genre enhancements. And now Capcom is making the most of a very good idea by rapidly

applying the same formula to the PS1 successor *Resident Evil 3: Nemesis*.

Launching in April, *RE3* transforms the original into a modern horror affair, ditching the clunky 'tank' controls and 32-bit graphics for a truly immersive and responsive third-person action fest. As before, you'll take control of

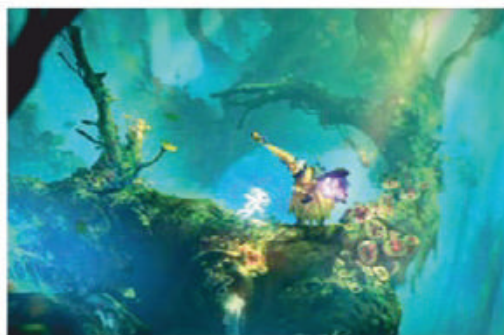
Jill Valentine and Umbrella agent Carlos Oliveira as they try to escape Raccoon City.

It's not in the title any more, but the towering Nemesis remains a persistent threat in the game, tailing Jill as she sprints through the zombie-filled wreckage of what used to be a functional city. And if you experienced Nemesis in

the *RE2* remake, then you'll know exactly how tense that can be.

If *RE3* can maintain that magic, then we could have another serious horror gem this year. We're also eager to try the Project Resistance 4v1 asymmetrical online mode, which was newly created for the remake.

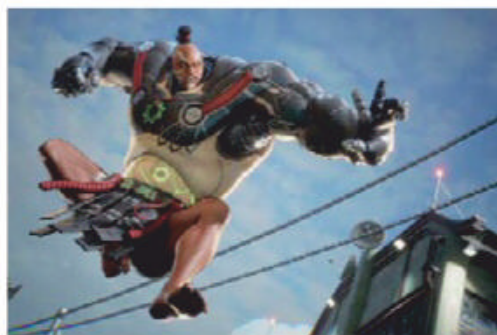
BEST OF XBOX EXCLUSIVES



ORI AND THE WILL OF THE WISPS

XB1, PC

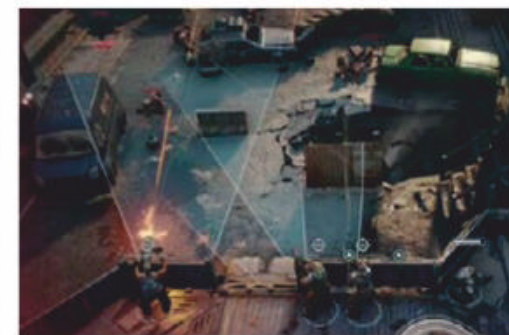
The original *Ori and the Blind Forest* was gorgeous, lovely and heartbreaking – and this sequel is set to continue that emotional approach. Expect more side-scrolling action in a dreamy world, this time with new attacks and massive bosses plus plenty more in the mix. Be ready to weep.



BLEEDING EDGE

XB1, PC

Hellblade maker Ninja Theory is on some raucous energy with *Bleeding Edge*, a 4v4 team-based melee brawler with a wildly diverse cast (including a granny) packing a wide array of abilities. It looks like the *Overwatch* version of an arcade beat-'em-up.



GEARS TACTICS

XB1, PC

Gears 5 gave the franchise fresh life, and now *Tactics* is coming to take things in an entirely different direction. Rather than run-and-gun, you'll strategise moves in a turn-based campaign that can't help but remind us of *X-Com*. It's not the *Gears* we know, but that might be a good thing.

INCOMING

APRIL

● FINAL FANTASY VII REMAKE

MAY

● IRON MAN VR

● THE LAST OF US PART II

JUNE

● DEATH STRANDING (PC)

● GHOST OF TSUSHIMA



START MENU

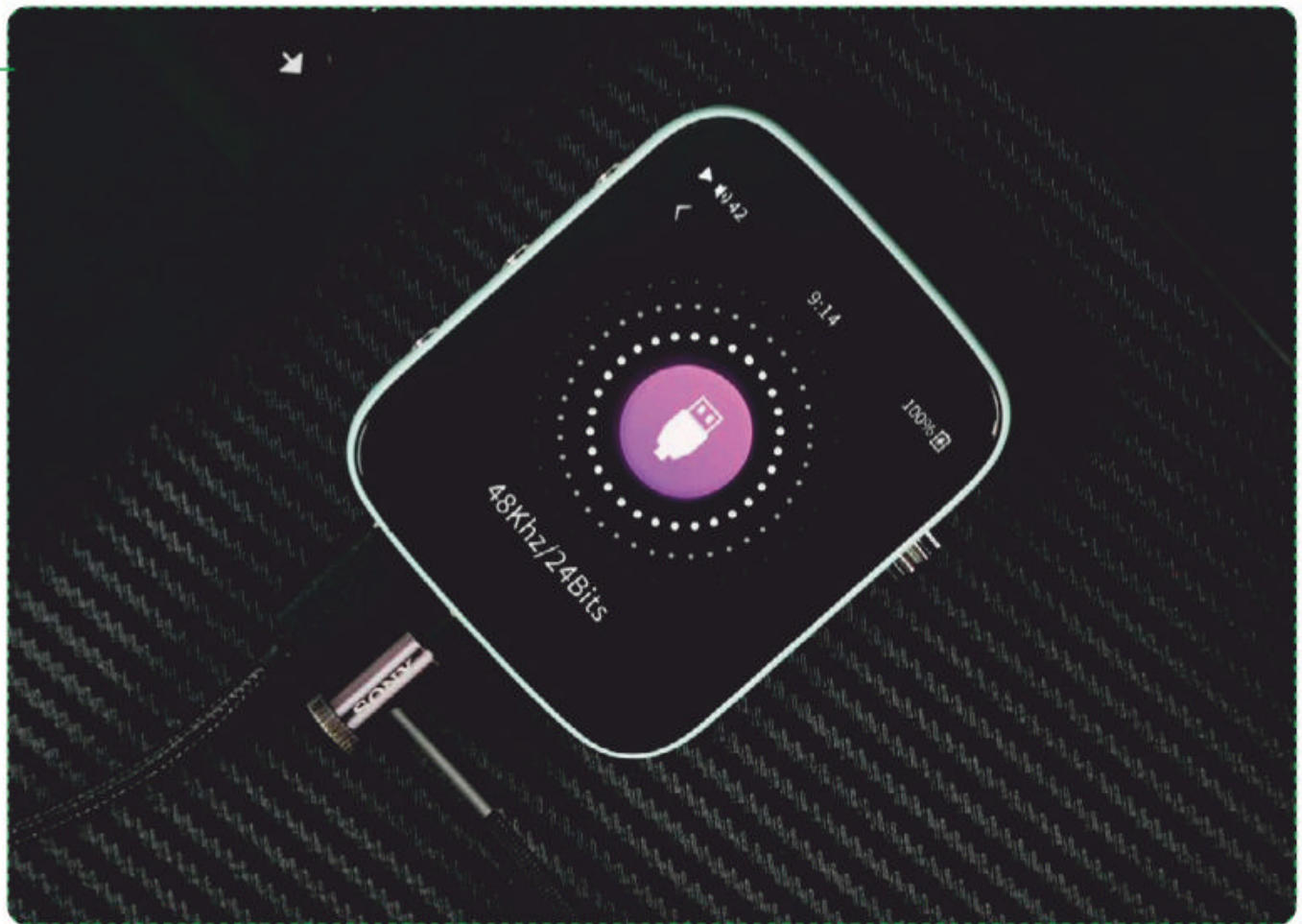
The latest startups, crowdfunded projects and plain crazy ideas

KICK-STARTER

Jukebox jewellery SHANLING Q1

There's a whiff of iPod Nano about the Shanling Q1, but Apple's music player never looked this cool. Eschewing minimalist tech, the Q1 instead draws inspiration from the 1950s with a playful design that's all smooth edges, chrome-like accents, physical buttons and gorgeous colours. But what of the audio? Well, it'll happily play hi-res files, which are loaded via microSD, and there's Bluetooth support so the Q1 can pair with wireless headphones or become a transmitter for an ancient PC. Digital USB output should please audiophiles, and the 21-hour battery life is almost enough to get you through half a Pink Floyd guitar solo.

\$89 / en.shanling.com



BACK IT

STACK IT

SACK IT

INDIE-GOGO

KICK-STARTER

KICK-STARTER

KICK-STARTER



Knob's full house AZIO FOKAL

This mechanical keyboard, with Gateron switches to make you feel like Hunter S Thompson, is inspired by classic cameras. The housing is aluminium with a leather surround, but the standout feature is the Fokal Control Knob. It can be clicked, has infinite spin, and waggles like a joystick – ideal for editing, multimedia or *Pac-Man*.

£142 / aziocorp.com



Give us a mew EBO

This 'bot will supplant you as your cat's best friend – which is fair enough when you see what Ebo offers. It blazes about, teases kitty with a laser pointer and adapts to play styles via AI. You can also capture snaps, add silly hats and post them online. Although, embarrass your cat once too many and you'll find Ebo face-down in the litter tray.

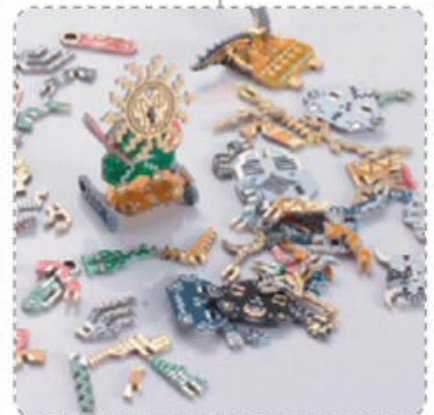
£136 / enabot.com



Take your pic SHUTTERGRIP 2

Afraid of dropping your phone down a ravine when shooting that perfect pic? Then shove it into a ShutterGrip 2 instead. Looking like the sawn-off end of a DSLR, this Bluetooth gadget gives you something to grip, a built-in selfie stick, a detachable remote and the means to attach tripods and lights.

\$35 / just-mobile.com



The golden bot GEEK CLUB DIY ROBOTICS KITS

There are loads of tiny robots knocking about these days, but these start out as tiny PCB components. By way of some soldering and engineering skills, you can quickly fashion a mini-army of light-sensitive walking bots with motors, blinking LEDs and some very arresting designs.

from \$59 / geekclub.com



Ingenious indoor illuminator DYSON LIGHTCYCLE MORPH

Our favourite lamp? Pixar's Luxo. But as far as non-anthropomorphic types go, Dyson's Lightcycle Morph could take some beating. An evolution of last year's Lightcycle, the Morph's headline feature is its ability to track natural daylight and adjust its brightness and colour temperature accordingly. It can rotate 360° to bounce light around the room, while an ambient mode emits a subtle orange glow with reduced blue light for bedtime. It can focus its output on desk-based hobbies or make-up application, or create dramatic effects to highlight art works.

Its six LEDs use Dyson's energy-efficient heat-pipe tech, which ensures your lamp will last for 60 years. Just as well, given the price.

from R9 800 / [dyson.com](https://www.dyson.com)



Munchkin multimedia magic YOTO PLAYER

This is a card-swallowing smart speaker designed for kids that negates the need for screen time and should, at least momentarily, stop them dribbling over your phone. By using NFC-enabled smartcards, your adorable little buggers can play stories, music, games, podcasts, radio stations and more. The first-gen Yoto was Kickstarter-funded and sold like hot pies; its successor features an improved design and some key tech upgrades, including an integrated battery, magnetic charging, stereo sound, Bluetooth support, and colourful animations relating to each card – and the library is vast, including audiobook titles by Enid Blyton and Ronald Dahl, plus the Gruffalo series and more.

R1600 (import) / [yotoplay.com](https://www.yotoplay.com)



? WTF IS APPLE CARKEY?

We know Apple is building an EV, but what's this?

The beta version of iOS 13.4 has been released, and one of the features they've been testing for eventual consumer release is the ability to use your iPhone or Apple Watch to open and lock your car. That could mean doing away with your key-fob or physical key altogether. Which is just as well, because we've already lost them.

But a dead phone battery means being locked out and stranded?

Nope. It'll even work if you're out of juice, because NFC chips harness the power of whatever device is reading them – in this case the car. You can adjust the settings for this feature in your Apple Wallet once you've paired your phone to unlock, lock and start your NFC-compatible wheels.

So if someone steal my phone, they steal my car?

Er... good point. We're not quite sure how Apple is going to get round that one, but let's say you probably shouldn't carry a sticker with your reg number on it to alert thieves... unless you're really, really thick, or really, really cocky.

Does Apple need the permission of my car maker?

Apple is said to be partnering with some already, but you'll probably have to wait until an official iOS 13.4 release to find out which. There'll need to be an NFC reader inside the car – put your phone or watch on top of it and that's when the CarKey feature magically appears on your display.

Any benefits other than to the criminal fraternity?

CarKey can be shared with others, just like time-limited electronic access on a smart door lock. You invite who you like through Wallet, and they're subsequently granted access through their Apple devices. Look out for more at WWDC later this year.

Cheesy quavers

The screen doesn't just display sheet music – it's a full Android interface complete with Alexa voice control.

We at NAMM

Thank you for the music, the songs we're singing...
and thank you for these gems unveiled at the
annual noise-making tech show in California

ROCK'N'ROLL ANIMALS



Boss Waza-Air

Headphones? Don't be silly – this is quite clearly a guitar amplifier. Oh, and also a sort of sonic VR headset. Working in tandem with a wireless dongle that plugs into your guitar, and the Boss Tone Studio mobile app for editing virtual amps and FX, the Waza-Air 'phones use gyro sensors and 3D ambience to make your ears think they're listening to a real amp in the room. There's even a 'virtual angry neighbour' option for realistic wall-banging effects. (No, there isn't really.)

R7 400 (import) / boss.info



Fender Maverick Dorado

When Fender discontinued its 12-string Electric XII model in 1969, there were a load of unused parts left over. Rather than building a giant bonfire to cry around, Fender's canny designers did some 21st-century-style upcycling and created the six-string Maverick instead. And now, from the Parallel Universe range, comes an update on that hippy-age oddity – complete with giant 'hockey stick' headstock designed for 12 tuners.

R45 000 / boutiqueguitars.co.za



Anasounds Spinner

Got to be honest – we've spent hours trying to work this one out and still don't really understand the point of it. What we do know is that it's a new kind of expression pedal for controlling the rate of your Anasounds tremolo (compatibility with other stompboxes is promised soon), using a magnetic system inspired by fidget spinners. So you kick the spiny bit, and the speed of its rotation controls the rate of the effect. Might be absolute genius, might be an apocalyptic fail.

R1900 / anasounds.com



LR Baggs Soundscape

We'd love to do this without mentioning the ginger gimp, but it's just not possible – because if Ed Sheeran is the first chapter of *How Acoustic Guitars Became Hip*, this clever little stompbox might just be the last. Getting a good sound from an amplified acoustic remains notoriously difficult, so the Soundscape works with an app to capture your guitar's natural response for sending out to every PA you plug it into. Goodbye forever to plasticky pickup tones?

Rtba / lrbaggs.com

METAL MACHINE MUSIC



Korg ARP 2600 FS

"There's a remake of the Korg ARP 2600 coming in the new year," said Jean-Michel Jarre back in December. "SHUSH!!!!" said Korg. But now the official cat is out of the official bag... and its limited production run has already sold out. In case you're not down on your synth history, this is the great '70s analogue monster that created the voice of R2-D2 in the original *Star Wars* films. It can also be used for, y'know, music. Tell them to make some more, Jean-Michel!

from R66 500 / korg.com



Roland GPX-F1 Facet Grand Piano

Well, we're pretty sure this is the first ever concept grand piano to feature in the pages of *Stuff*. Roland's angular marvel was actually revealed at the CES show a couple of weeks before NAMM, but nobody noticed it there because they were all too busy looking at sex robots. It's digital, of course, with a frame designed to project the sound out to the audience from speakers hiding in the base.

N/A (concept) / roland.com



Arturia KeyStep Pro

Our favourite French company is Danone, maker of the vanilla Ultra Mel and various other, less spectacular dairy products. Our second-favourite French company is almost certainly Arturia, maker of a whole range of crazy synths... and now an 'all-in-one sequencing solution'. The KeyStep Pro has a 37-note keyboard, four polyphonic sequencer tracks and an integrated drum machine. It's also available in chocolate and caramel flavours. No, sorry, that's the custard.

R6 600 / arturia.com



Blipblox After Dark

You might argue that the very act of making music is fundamentally childish. Why else would we talk of playing an instrument, rather than working it? So there's no need to be embarrassed at being discovered hunched over this, an 'adult' version of the Blipblox synth toy. And it's not just the moody colours that are new: unlike the kids' version, it has a multi-mode resonant filter and multi-tap stereo delay. Hooray for thoroughly grown-up squelchy fart noises!

Rtba / blipblox.com



Sinister kill-bots, sinister body-swappers, sinister ghosts, sinister robots... can you detect a theme to this month's best streaming TV?



Altered Carbon

The premise behind this visually stunning cyberpunk series – that we can digitise our consciousness and transfer it between different bodies to live forever – means recasting its main character between seasons is no big deal. So Anthony Mackie replaces Joel Kinnaman as ruthless private dick Takeshi Kovacs.

S2 / Netflix



Spirited Away

It's wonderful news for any cinema lover: Netflix has bagged the streaming rights to all Studio Ghibli's movies, including Hayao Miyazaki's masterpiece *Spirited Away*. Telling the story of a young girl drawn into a world of spirits, it's a truly beautiful, life-affirming piece of work that everyone should see – animation fan or not.

Film / Netflix



Godzilla: King of the Monsters

Yep, it's big monsters punching each other. *Stranger Things*' Millie Bobby Brown provides the human perspective as a host of towering beasts rise from their slumber and set about wrecking the world. The only thing that can stop them from wiping us all out? The titular lizard, now working for humanity.

Film / Box Office (R40)



Spenser Confidential

This Netflix action comedy stars Mark Wahlberg as an ex-cop fresh out of jail for – you guessed it – a crime he didn't commit. His plans to move on are put on hold when a pair of ex-colleagues are killed, dragging him back into the world of crime-busting. But this time he has Winston Duke's aspiring MMA fighter as his unlikely partner.

Film / Netflix



Amazing Stories

Spielberg has revived his mid-'80s anthology series exploring all things weird and wonderful for Apple TV+. And while we don't know exactly what to expect (there hasn't been so much as a teaser trailer at time of writing), we do know it'll involve a bunch of different directors and different tales spanning the horror, sci-fi and fantasy genres.

S1 / Apple TV+



Ragnarok

When was the last time you really enjoyed a dubbed series? *Heidi*? *Brakanjan*? *Rabobi*? Time to update your experience with *Ragnarok*, a Norwegian series about teenagers with special abilities. It all sounds a bit X-Men, except there are frost giants, hammers and electricity. That last is in short supply in SA, making this some fantasy watching.

S1 / Netflix



Westworld **S3 / Showmax**

We're not in Westworld any more, Toto. In this third season of the mind-bending sci-fi show, the cowboy theme park full of sexy killer robots fades into the background as the 'hosts' break out into the real world and spark off all sorts of mayhem. Look out for a WWII-themed subplot, lots of musing on the nature of AI and consciousness, fresh faces in the form of Aaron Paul and Vincent Cassell – and a return for Ed Harris's enigmatic Man in Black. Fans of intelligent (and gory) sci-fi, get ready for some violent delights.

DON'T MISS THIS

Audi AI:ME

WHEN YOU WHIFF UPON A CAR

Audi's latest tech concept wants to be your friend and douse you in perfume on special occasions.



N/A (concept) / audi.co.za

NEWS DASHBOARD

What's going on here?

The CES exhibition can be a bit embarrassing for the big car brands. It's the trade-show equivalent of your dad trying to lecture you on the current drill music scene. Mercedes-Benz, for example, released a concept car based on *Avatar* that featured 33 'bionic flaps'. Because, you know, we all need bionic flaps in our lives.

And so Audi has fallen for the same totally awks trap?

Not quite, because this little AI:ME concept not only looks like an autonomous electric vehicle we'd happily spend money on – it also boasts some neat tech inside.

Tech that can transport us to the mysterious world of Pandora?

No, that's in the Merc... probably. The Audi will check your vital stats and state of mind in order to set up the car perfectly, including blasting

the interior with a mood-boosting scent. It also has a 3D head-up display, courtesy of Samsung, which projects driving information on the road so it appears up to 70m ahead – meaning your eyes no longer have to refocus.

I'm guessing it's not a diesel.

It's electric, of course, and capable of fully autonomous driving. This is a vehicle in which to kick back and relax, with occupants only required to gaze at menu screens in order to browse websites or order food. That's right, it's got eye-tracking tech.

Where do I sign?

Easy, tiger. This is purely a concept, but the exterior styling could be a great indicator of what's to come from Audi. Plus, the 3D display is likely to filter down to production models... which is surely more than you can say about those bionic flaps.



IT'S CORSAS FOR COURSES

The first Corsa-e electric models are now hitting Vauxhall (that's Opel, to you and me) dealers, offering a decent 336km on a charge. And somewhat more excitingly, They're already busy conducting durability tests for an e-Rally Cup version – the first ever battery-driven rally car.



IT'S ROAMERS FOR ROVERS

Jaguar Land Rover has announced that its new Defender will be the first production vehicle to feature dual LTE modems, allowing it to roam across multiple networks in different regions. This means no more in-dealer updates, and uninterrupted Toto playlists even when traversing the wilds of Africa.



IT'S BULLY FOR CULLI

The Rolls-Royce Cullinan is a divisive creature. Some see it as the pinnacle of SUV luxury, while others believe it's an obnoxious box of poor taste. Whatever your opinion, the Cullinan has become the best-selling Roller ever, with 5152 delivered to buyers in over 50 countries last year.

Little rad booster

Prepare to add another name to your action-cam shortlist: the Insta360 One R has three secret weapons to improve your fearless shooting



Watch out, GoPro and DJI – the world of action cameras is moving mighty fast, and you're no longer the only companies making big moves or modular models.

The Insta360 One R is a perfect example: a tiny camera with clever software, great image stabilisation and,

depending on how much you're willing to spend, up to three modules that drastically change the way it shoots videos and still photos.

The modular three-section design is key to the One R's appeal. The camera consists of a core (featuring a touch display, card slot and USB-C port for charging), a camera

module (with three mods to choose from) and a battery base, all of which push and snap easily together.

There's a lot to be said for this sort of user-friendliness and versatility in an action camera, and the One R promises to deliver on both fronts. It'd take us a month or two to really explore everything this camera

can do – especially with the firmware and app being frequently updated, and even more features and shooting modes to be potentially added in the near future – but for now, how does this flexitarian approach work out in practice? We braved the winds of South Africa's Eastern Cape beaches to find out just that.

1 Rad dwarf

No matter which mod you've got fitted, the One R is small, lightweight and pocket-friendly. It comes with a cage and mount adaptor allowing you to fit it to the same harnesses and mounts as a GoPro – a smart choice given the sheer number of them out there.

2 Rad of iron

The small, boxy, sturdy design means you don't have to treat this thing with kid gloves. Two camera modules have built-in scratch-proof lens covers, while the other comes with a tough rubber slip cover. The camera is waterproof to 5m.

3 Pimp my rad

The feature list is epic. A lot of the shooting modes revolve around AI, where the mobile app takes the editing reins and hands them over to a robot. As long as you shoot within certain parameters, you can achieve cool-looking clips using very little effort.

4 Rad awakening

Other smart features include limited voice control, 5G Wi-Fi (which is best used to link the camera up to the phone running the app), a microSD slot able to accommodate cards up to 256GB, and a USB-C port for charging and file transfer.

5 Raddy for anything

Choose from a dual-lens 360° camera, a 4K wide-angle, and a wide-angle with a 1in sensor made in partnership with Leica. This offers excellent quality... but is pricey. You can shoot in a wide range of resolutions and frame rates depending on the module.



24 hours with the Insta360 One R

● Good
● Meh
● Evil





Techspecs

Video 4000x3000 @ 30fps, 3840x2160 @ 60fps

Stills 12MP

Display 1.3in touchscreen

Connectivity USB-C, 5G Wi-Fi, Bluetooth 4.0

Battery 1190mAh

Dimensions (with 4K module) 72x48x32mm, 121g

Flexible fiend

Ready to nail the gnarl? Here are our top shooting tips to get the best out of the versatile One R...



■ Make things happen

With the 4K wide-angle camera, you're able to shoot in up to 4K (duh!), which actually looks sharper than the 360° 5.7K footage as it points in just one direction, with a narrower field of view.



■ Make things even

The image stabilisation is great and so is the auto-stitching, as long as you don't film things too close to the 360° camera. The 'invisible selfie stick' makes for compelling movie clips.



■ Make things out

Image quality is fine, with the sort of detail we'd expect from a small action camera. There are HDR and night modes, which add some processing jiggery-pokery to improve clarity in tricky conditions.



■ Make things better

The Leica module provides a sharper, cleaner image than the other two, but we think the 360° and 4K modules are good enough. You can of course edit the files, with RAW stills and flat log videos available.

As a GoPro alternative, the One R is a strong contender – particularly if you see yourself shooting a lot of 360° videos or photos. We suspect GoPro's reputation for reliability and all-round performance will keep it as the go-to choice for most – but if Insta360 continues to support and improve on its products, it may overtake the leader – and DJI – soon.

STUFF SAYS ★★★★★

A versatile and powerful action cam that's absolutely stuffed with features

Wow, so many features. We're really taken with the stop-motion effect.

We've experienced some reliability issues with the app.

Mind you, software and firmware updates should see that right.

The Leica lens really does offer the best image quality of the lot.

That's a lot more than the R6700 of the basic model, though.

12hrs

15hrs

15.1hrs

22hrs

24hrs

The alternatives: The action cams to beat

For filming outdoor escapades, it's a two-horse race... or at least, it was until Insta360's little gadget came galloping around the corner

DJI Osmo Action

R5 000 / takealot.com

What's the story?

Drone maker DJI wants to dethrone GoPro with its familiar design, comparable video specs and a handy front display. It also has RockSteady, DJI's answer to GoPro's HyperSmooth tech, which claims to provide the smoothest footage on the block.

Is it any good?

DJI's action cam succeeds in a couple of key areas. The stabilisation is great and the face-optimised metering makes it an ideal choice for vloggers wishing to capture 4K footage at 60fps with HDR, or equally cracking slo-mo and timelapse videos. It does have some idiosyncrasies, but the mix of buttons, voice controls and dual displays makes navigating menus an easy series of taps and swipes on a cam that can handle extreme environments. This is a smart shooter that captures great footage without faff.

KEY SPECS

Video 4K @ 60fps, 1080p

@ 240fps **Stills** 12MP

Displays 2.25in rear touchscreen, 1.4in front

Connectivity Bluetooth, Wi-Fi, USB-C

Battery 1300mAh

Dimensions 65x42x35mm, 124g

Stuff says

★★★★★

Top video quality and stabilisation make this a superb cam



GoPro Hero8 Black

R7 000 / capeunionmart.co.za

What's the story?

GoPro isn't going anywhere, having stepped things up with its Hero8 Black. Combining 12MP stills with a range of wide angles, waterproofing, next-gen stabilisation and the smartest timelapse recording we've used, it's a big improvement on the Hero7 Black.

Is it any good?

The Hero8 Black has serious competition in the shape of the DJI Osmo Action and now the Insta360 One R, but this is very much the OG of action cams. The mounting system with folding feet is a real highlight and the level of image stabilisation on offer is frankly bonkers: you shake it, they stay still, and it grips onto detail like a dog with a bone. We'd have liked a bigger screen and better low-light performance, but the nuts and bolts of the Hero8 are just as they need to be, making this a fantastic bump over the old model.

KEY SPECS

Video 4K @ 60fps, 1080p

@ 240fps **Stills** 12MP

Display 2in LCD touchscreen

Connectivity Wi-Fi, Bluetooth, GPS, mic input

Battery 1220mAh

Dimensions 66x48x28mm, 126g

Stuff says

★★★★★

Our favourite action camera is a very stable genius

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2 Test Match

We test phones, laptops, tablets, headphones, cars, and anything else that recently appeared in a tech keynote so you don't have to. No tech is too big or too small (except when it is – it happens) for us to poke, pick at, prod, or play with. And we pass the results on to you, for better-informed gadget purchase choices.

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[instagram.com/stuffsa](https://www.instagram.com/stuffsa)

3 List Value

Looking for a quick comparison of the very best tech available right this second? *Stuff*'s Top 10 pages collect and collate the gear you want in an easy-to-compare format. The top item in each list is the best of the best in its category – from phones to laptops to cameras, Bluetooth speakers to headphones to VR to games, it's all there.

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Base Load Generation

“What are you going to do about it,” Eskom cried. “Make your own damn power?!” “Yes,” the country replied. “We’ll install generators!” Here’s how you can join the revolution while keeping the home fires er... burning

Remember, in 2008 when load shedding first turned up and we thought it was done and dusted? Remember, in 2015, when it came back and we were all surprised? Remember how, in 2019, load shedding rocked up again?

If it does go away (again), suspiciously close to a national election, you can be assured that load shedding will be back. Bigger and badder than ever before, to boot. The state power utility seems intent on fixing its balls-up this time around but, when it comes to treatment, the cure is always less pleasant than prevention. Sadly, there has been

taking care of ourselves. There are many ways to do that, from stocking up on essential tech (p52) to going off the grid (p64) but the point is that we can't wait for Eskom to get its act together. Rather than sitting in the darkness, we need to guide ourselves towards the light.

And that's where generators come in. They turn dead dinosaurs into light, and internet, as well as heat and cold. You know, those things that Eskom (and the people who screwed it up) are denying South Africa?

Here's where you can get to know

We're sorry to report that there's some math homework coming...

precious little prevention going on.

Now we can't do anything about Eskom, except keep a closer eye on its finances and possibly disembowel anyone who steals large chunks of money from the company. We're left with a very specific course of action:

your generators, and your home, a little better. We're sorry to report that there's some math homework coming but the end result is a more bearable load-shedding schedule. Even if things get worse, which they probably will before they get better.

WHEN WILL IT END?

Here's where there's a little bad news. Eskom, in February this year, said it was working on an 18-month plan of load shedding to get the ageing utility running a little better. And that's a minimum number. Eskom COO Jan Oberholzer said "...we will be able to, after

18 months, be in a situation where we have the reliability and predictability back on the majority of our units." Translation: Load shedding will be here until at least August 2021. And probably beyond. That's a long time to sit and do nothing, folks. Don't do that.





Gimme fuel, gimme fire

**So you have to buy a generator?
Well, time to decide on a type, then
on a size. We're here to take the
mystery out of that**

Petrolhead

A petrol generator is going to look mighty attractive right about now. The entry-level models are cheap and you'll find that scaling up will work out cheaper as well. But there are a few things to bear in mind – petrol gennys are cheaper for a reason. The engines need more maintenance more frequently, and they're a little thirstier than their sturdier competition as well. But they tend to be more lightweight to boot, so if you're looking for portability, you may want to spend your money over here.

There are other pros and cons to be noted – petrol tends to run quieter, but the machine also runs hotter. Petrol is also a more combustible fuel. If you're concerned about safety, it might be a plan to look elsewhere.

Sour Diesel

Conversely, a diesel generator might seem like it's just what you need – the engines are hardwearing, don't run at hot as petrol and require less maintenance. They're more expensive from the outset, though, so the costing balances out. A diesel engine tends to be more reliable, especially if you've paid a higher price upfront, and its ignition methods make them less... explodey.

They're also more fuel efficient – you won't burn quite as much fuel to power the same gear as a petrol generator. On the other side of the equation, their robust nature make them harder to move around and they're considerably louder – hopefully you're planning on making them a permanent installation somewhere sheltered, where you can muffle the sound. But if the noise, size, and initial cost is fine, diesel is your best friend. ▶

***There are other
pros and cons to
be noted – petrol
tends to run
quieter, but the
machine also
runs hotter***

PASSING GAS

There's a third generator option, but you're not going to take it. Maybe you'll find it attractive, but your wallet and/or bank most certainly will not. Gas generators are quieter, more efficient and can even be set up to heat your home. Plus, you know, gas is cheap[er than petrol]. But... they're hard to find in South Africa in smaller sizes so the price barrier is large enough to keep out a zombie horde. A 7.5kW gas generator is several thousand rand more than its liquid competitors – not least of all because they tend to be imports. The relatively cheap price of liquid propane or natural gas isn't enough to offset the cost. Unless you're buying big and integrating it into your home, that is.

Counting the cost

Before you buy a generator, you should know how much power you need. While things get a little tricky, as long as you can add (or have a calculator) you should be fine

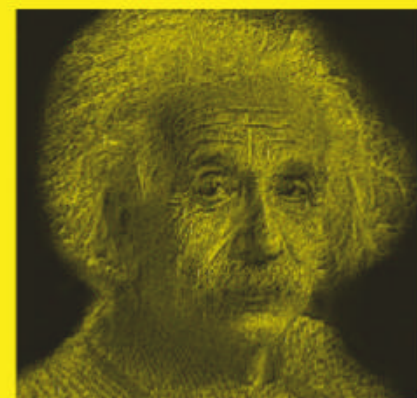
You know which sort of generator you crave, now it's time to determine its size. That's easy enough to do, we've just got to do this little thing called addition. Take the watt value of your items and add them together. Divide the result by 1000, and you'll have the value in kilowatts (kW). Here's a sample list:

Samsung RU7100	145W
Xbox One X	245W
Fridge	460W
Philips 3200 LatteGo	1500W
Russel Hobbes 1.8l	2400W
8 x 11W LED bulbs	88W
Total	4838W
	(4.85kW)

At first glance, you'd think that a 5kW generator would be enough to run this

lot. And, if you got rid of the fridge and the coffee machine, you'd be correct. But anything with an electric motor also has something called startup wattage.

Startup wattage is a temporary power draw that has to be factored in to the total. It's a little like your starter motor in your car – extra power is required. A fridge may run at 460W but it could have a startup cost of 1500W. Which adds to our figure, taking it from 4.85kW to 5.9kW – meaning you need at least a 6kW generator to run the items listed. As for finding starting wattage figures, you'll need to consult the documentation. Yup, gotta read the manual, we're afraid. There's no reliable formula for it. But, once you're done with your math homework (correctly), it's time to power up your home. 🏠



HOW TO... FORMULA

Watt you talking 'bout?

Sometimes your appliances aren't going to play ball when it comes to wattage info. If you're faced with a figure in amps [A], as we found with a computer monitor [1.1A], here's how to get to watts [W]. The formula is:

$$P = I \times V$$

or watts = amps x voltage

Here in South Africa, voltage is 220, unless otherwise specified [if you're using three-phase power, for instance]. So, to find our monitor wattage it's $P \text{ [watts]} = 1.1 \text{ [amps]} \times 220 \text{ [volts]}$. So P equals 242 watts.

Picking up a few Kilos

A far simpler equation to deal with is converting kilowatts [kW] to watts [W]. You've been to school, you should know what a kilogram is. It doesn't get much easier [and no, your math teacher won't accept this calculation – even if it produces the right answer].

$$W = kW \times 1000$$

So $3.2kW \times 1000 = 3200 \text{ watts}$.

Apparently this works

Something else you'll encounter when buying a generator is a little something called kVA or kilo-volt-amperes. Relax, it's just a measure of apparent power. You don't need to panic about it. You just need to do a little reading. To go from kVa to W [kilo-volt-amperes to watts], you need the power factor [pf] – which is a variable number depending on the device [usually a generator] between 0.1 and 1.

$$W = [kVa \times pf] \times 1000$$

Ryobi's RG-1200 generator, for example, runs at 1.2kVa and has a power factor of 1. To get to watts: $[1.2 \times 1] \times 1000$, which gives us 1200W. If the power factor was 0.8, it would look like this – $[1.2 \times 0.8] \times 1000 = 960W$. Easy, no?

Generator Rex

Once all your homework is done, it's time for some metaphorical cartoons – in the shape of stationary engines that'll transform your home into a palace of light



There are a lot of generator options out there. They're a little bit like desktop PCs in that there's no simple formula for choosing one – you wind up picking what works best for your specific situation. Knowing if you'll need a CD tray or Type C connections will save you a lot of time and frustration.

You might be a low-resource user who just wants to keep the lights on – in which case you buy the generator equivalent of a Chromebook. Perhaps you're a power-user, keen on multi-tasking and more than a little gaming. In that case you'll be looking at a 10kW gaming rig. It may be you're just a standard user who only selects what they

need. You'd be the type to purchase a 5.5kW or 6.5kW genny without planning for any extra headroom. Boring, but safe. Or maybe you subscribe to the idea that there's no kill like overkill, in which case you'll snag the huge Mac Pro-like Mac-Afric installation featured on these pages. Which, incidentally, costs about an eighth of a fully loaded

2019 Mac Pro's R900 000 or so. Just in case you thought generator prices were insane.

We've got two each of the main generator types – petrol and diesel – across a range of budget types for you. They're not going to suit every use case – only you (and your homework) can say for sure what you need. But this is a good start.

Always
time for lubricant

Generators are engines and the thing about engines is that you need to know how to use them. If you overload something small like this – and it's very easy to do that – it might just burn out. Or blow up...



Virtually no AVR

Being a super-budget generator, there's no AVR (automatic voltage regulator) in place – which is the whole reason you're going to need an inverter. Unless, that is, you're not emotionally attached to whatever it is you're plugging in.

BEST FOR
TIGHT
BUDGETS

Ryobi RG-950 2-stroke Price R2 350 / builders.co.za

What's the story?

You know how in *Pokémon* there's a starter critter that gets you familiar with the game? Wrong crowd? Ah well. This small two-stroke petrol generator is very much a beginner's option, within reach of many budgets while still ticking a few boxes. If you need just a few (small) items powered, here's your stop.

Are they any good?

You've heard the saying 'Any port in a storm?' Well, folks, it's storming in South Africa and

if this is where your budget stretches, then this is where you pull in. But don't expect the Earth from this little genny. It'll keep some lights on in a pinch or, if you're running a lightweight TV set then it'll keep the kids clustered around the screen.

The relatively tiny rated power output of 650W means you're severely limited in terms of what you're running. To put things into perspective, you couldn't even get a standard gaming PC running using this generator. Those tend to pack

a 1000W power supply at minimum and unless you're actively *trying* to kill your computer, you shouldn't even plug it in. Oh, yes, you're going to need an inverter for this critter as well or you can kiss your kit goodbye.

There's also a startup cost for some devices (like your fridge, for instance) which pushes up the power rating you need to run something. Even if your fridge is only 500W, the startup cost makes the Ryobi RG-950 a touch sketchy. It *might* run, but

you'll risk burning out both the generator and your appliances. In reality, you're probably better off with a buttload of portable power banks for your devices and a selection of battery-powered ceiling lights to brighten your way. It's a plan to spend a fair bit more for better coverage when Eskom does its thing.

Tech specs

- Consumption (avg): 0.7l/h
- Output 650W
- Run time 6 hours
- Weight 17.2kg

STUFF SAYS It's not going to run more than a few appliances but at what cost? ★★☆☆☆



BEST FOR
LONG TERM
USE

Safe as houses

One thing about diesel generators – they're quite a lot safer to operate than their petrol counterparts. That's down to the fuel. It's possible to set your home on fire using diesel but it's so much easier with regular gasoline.

Smells like... teen spirit?

Diesel generators have a few things going for them – a decent smell is not one of those things. They tend to be smellier overall than petrol options. Hey, you can't have everything, okay? Just take the sturdier engine and go.

Gentech Diesel Electric Generator Price R23 500 / leeroymerlin.co.za

What's the story?

This versatile but compact diesel generator is a good fit for almost any South African home, offering a great power range – unless you're trying to power your sixteen-room mansion. It's good but it's not quite that good. And, as you'll find, there's a reason why it's more expensive than its petrol powered bretheren.

Are they any good?

It's a diesel generator, which means you're automatically paying more for it. That's both

a good and a bad thing. Bad for budgets, sure, but you'll wind up spending less on it in the long run. Maintenance periods are longer and the engine itself is hardier, so upkeep should be cheaper over time. Which is why they tend to see use as industrial items.

But this one's a great choice for home use. The 18-litre tank will give you six hours of power at a time, while the built-in AVR ensures that power is largely clean – a must when you're running items like a TV set, DSTv

decoder and/or an Xbox One. Can't let your babies take any damage, after all.

There are two power plugs, which'll sprout multiplugs in short order. This genny pumps out single-phase power, which is handy because that's what most of South Africa is connected to as well. Your appliances should feel right at home. It's a little louder than a petrol equivalent but that's fine – it'll be outside anyway.

There's a key start, as well as a recoil starter if you fancy doing things the hard way. A

digital readout gives you frequency and voltage info but it's got a more useful option – how many hours the genny's been running. In addition to the AVR, this diesel features a circuit breaker – just in case you're a muppet and overload the blasted thing. But you won't, because you did your math homework (p38).

Tech specs

- Consumption (avg): 4.2l/h
- Output 6.5kW
- Run time 6 hours
- Weight 87kg

STUFF SAYS It'll cost a mite more up front but the savings will turn up later ★★★★★☆

BEST FOR
COVERING
BASES

Overkill?

Before opting for the 7kW generator, do the maths on the devices you're using at home. If you're only coming in at around 5.5kW (make sure you're including startup costs), you can opt for a cheaper genny and still run it all.



Take it outside

This shouldn't need saying but we're going to say it anyway. No generator... and again for the kids at the back... NO GENERATOR should be operated inside where there are people. It's got an exhaust. Keep it outside.

Ryobi RG-7900K Price R11500 / builders.co.za

What's the story?

Stepping into 'actually useful' territory is Ryobi's RG-7900K, a pricier four-stroke petrol generator that'll do some interesting stuff around your home — like keep your fridge running, as well as lights, a TV, a game console, perhaps a computer, your internet and a kettle. But don't use this list as gospel. Do the math, first.

Are they any good?

Yup. There's no ripcord start, so you can pretend you're starting a very small car with

the key. It's wheeled, because only bodybuilders and serial killers lift 95kg regularly, and it's fitted with its own AVR (automatic voltage regulator). You won't need an inverter, but it's recommended if you're powering sensitive stuff.

The RG-7900K is rated for 7kW, giving you loads of options when it comes to what to power. There are two output plugs and we're pretty sure those will be connected to extension leads and then multiplugs in short order but make sure you're within

Ryobi's rated power spec. As with most generators, overload it and you'll void the warrantee. It's better to run with less and be sure you're not going to cook your portable Eskom competitor.

Four-stroke petrol engines tend to be a little more stable but the 25-litre tank does feel like you're running a stationary motorcycle at home. You'll get seven hours of power from a tank, though, and you won't have to chuck in a lubricant mix the way you would with a two-stroke petrol genny.

Think of it as a simpler, more robust and far more useful version of our starter Ryobi. Because, you know, it runs more than just lights. Ideally, you want to stretch your budget this far — it'll be worth it to run a microwave while your neighbourfolk are cursing at the thought of peanut butter sarmies again.

Tech specs

- Consumption (avg): 3.6l/h
- Output 7KW
- Run time 7 hours
- Weight 95kg

STUFF SAYS Now we're talking — as long as the tank's full, life's loud but good ★★★★★



You can't take it with you

Don't expect to cart this one in and out of the house. At more than a ton, it'll have to be bolted into the ground. Which is just as well, because it's also got to be permanently wired into your house.

Run time

This generator's run time is defined by how much you're powering at once. If you're sorting out several buildings, expect twelve hours on a tank. But if you're delivering to one modest one, you'll get a little more light per litre.

BEST FOR
UNLIMITED
BUDGETS

Mac-Afric Standby Silent Diesel Generator Price R145 000 / adendorff.co.za

What's the story?

What do you do when you need to run absolutely everything you own? And, for good measure, the stuff both your neighbours own as well? You choose a huge generator like this Mac-Afric diesel, which needs a permanent installation. It does weigh more than a ton, after all.

Are they any good?

Yes. Yes, it's very good indeed. Unless you're the sort of person who needs to check your bank account before

buying lunch, in which case you can only dream about owning one of these. This Mac-Afric generator is a water-cooled, turbo-charged four-stroke wonder that's more likely to wind up out back of a small business than at a home. Oh, but if you could afford one...

It'll run everything you own and then some, making it massive overkill for the average South African house. Which is fine, because the average South African can't afford it. It delivers three-

phase power and should run the grounds at a smallholding without breathing hard. The person refilling the 110-litre tank *will* be breathing a little hard, though.

At just shy of R150k, this generator has everything. It'll automatically start when the power dies, it comes standard with an AVR so power delivery is as clean as possible, and it's also designed to be as quiet as possible. That's a relative term when it comes to generators but 74db isn't bad, as these things go.

But, in order to own one, you'll need to be able to a) afford one, b) afford delivery, c) afford installation, and d) afford to keep it filled with diesel. But if you can pull that off, you won't even notice that the rest of the country's power has disappeared until they knock on your door in search of hot water.

Tech specs

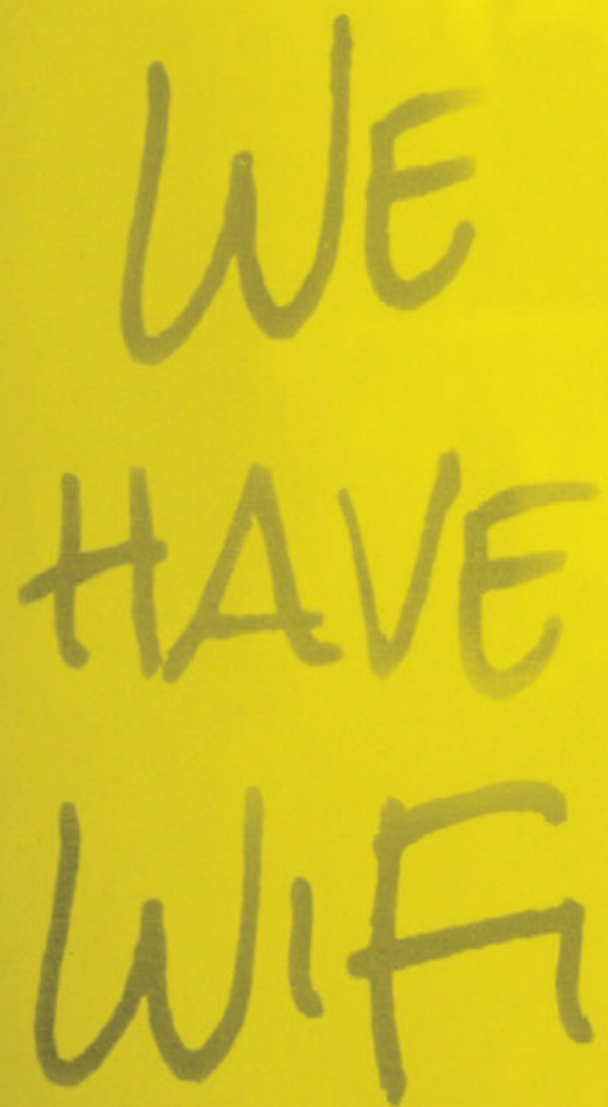
- Consumption (avg): 10.3l/h
- Output 40KW
- Run time 12 hours
- Weight 1120kg

STUFF SAYS If you have the cash for one of these, er... can we come live with you? ★★★★★☆

WHY WIFI?

Load shedding is here to stay, boys and girls. We should be planning for the future. Like how we'll manage to watch *Stranger Things* S4 or how we'll scroll through Instagram mindlessly tomorrow night by candlelight.

What if we told you there is a way to keep your WiFi on during load shedding? It's not fool-proof, as most of it depends on your fibre network and ISPs' ability to keep the connection running on their side during blackouts. But when it comes to hardware, it's easy enough to set up a load shedding-proof WiFi connection



Anyone with a fixed-line connection knows that WiFi drops when the power dies. Here's how to make sure the Optical Network Terminal, or ONT (the box against the wall) and the router both have the power to keep the internet juices flowing.

The fixed-line solution

This is, by far, the most complicated internet connection to keep running when the power goes out. But with a few nifty pieces of hardware, you can keep it up for a few hours while Eskom figures out which switch to flip.

If you're on a fixed fibre connection, you have an ONT, which your fibre provider installed, and the router you got from the ISP. You'll need to power both of these during load shedding to have an active connection. Only one won't do. Budget to buy more.

We suggest investing in a small (or larger, depending on your budget) UPS. A UPS (p62) is an uninterruptible power supply and they come in all

shapes, sizes and compatibilities. The thing is, these are made to keep computers and larger hardware running, so they may not have the correct plug points for a router. But we'll get to that...

Get the hardware

The easiest (albeit more expensive) solution is to get a dedicated mini-UPS for a router/ONT. You'll need the correct plug points and cables, though. They cost anywhere from R1200 upwards and are fairly easy to find online these days. These should keep your WiFi on for the expected 4 hours of load shedding, so they're kinda perfect.

A cheaper option is to use a PC UPS. You could opt for a normal 600VA UPS that'll cost anywhere between R500 and R1000. The only problem here is that you'll need an IEC adaptor to connect the router and the ONT to the UPS. These will generally last far longer (you can get up to 10 hours only running the router configuration). But you'll need more technical know-how to get the setup running.

Another solution is installing an IPS — an internet power supply. A company

NOW
ADD
THIS



ADATA P20000D PORTABLE POWER BANK

There isn't much a giant power bank can't fix. Phone dead? Power bank. MiFi dead? Power bank? Nintendo Switch dead? Power bank. Life's a mess? Power bank. Especially if it has 20 000mAh capacity. **R420 / takealot.com**

called TechDoctor (techdoctor.co.za) does installations of IPSes at a cost of R1500. These doodads will keep your WiFi config running as they're proprietary (made specifically for this problem). This is the easiest solution, but it's more expensive.

It might not even work

Bear in mind, even if you keep your router and ONT up and running through load shedding, your ISP may not have backup power on their side. This means your internet connection may not stay up, even with all those batteries in place. You can check with your ISP if they have backup systems in place.

Another potential issue is: different routers/ONT's may have varying power needs, so our recommended UPSes may not be equipped to handle the load. You'll need to experiment with this, or opt for at least a 1000VA UPS to make sure it can keep your hardware alive during blackouts.

In any case, we recommend getting a mobile MiFi router and a backup data-only SIM card that'll keep your connection going even when the fibre's down.

KEEPING YOUR DATA FROM BEING PAINTED BLACK

In our quest to find the right solution to your 24/7 data needs, we rolled out our electronic reporters and left no stone unturned

Start Me Up UPS 12V (4800mAh)

This 12V UPS is an uninterruptible power supply that keeps 12V devices juiced up during blackouts. Like your WiFi hardware. You'll need two: one for your router and one for your ONT. The little black box has never been more useful.

R1 600 / takealot.com



Mother's little helper Internet Power Unit

The nice people at TechDoctor will do a full installation of an IPU so you don't have to get off your backside to keep streaming. The IPU can keep the fibre flowing for up to ten hours. Stage 8's got nothing on this.

R1 600 / techdoctor.co.za



Jumpin' Jack Flash Rain 4G SIM

Nothing gets South Africans as riled up as data prices. Well, what's up with these crazy costs, right? Rain has the best data deals on the market. Data does not expire as you'll just pay-as-you-use. Worth it.

R50 p/GB / rain.co.za



Midnight Rambler ZTE Wireless Pocket Router

The great thing about a MiFi is that you can take it just about anywhere. Pair it with a Rain SIM and you've got data for days. Just remember to charge it up before load shedding strikes to keep on scrolling.

R800 / takealot.co.za



"You can take our lights. You can take all our frozen food, but don't you dare take our WiFi from us."

— ancient South African proverb

NOW
ADD
THIS



SPEEDTEST APP

Is someone leeching off your line? Use this free WiFi speed test app. It'll calculate the speed of your connection.

**Free /
iOS, Android**

Connect to mobile

If all else fails, there's always mobile data. We know that mobile networks have been working to keep their towers on during load shedding using backup power (and even generators), so your best bet on staying connected is mobile.

Mobile routers (or MiFi devices) don't need to be plugged into a wall socket to run. Most of them have the ability to stay on for hours on one charge. You can also easily connect them to a power bank to recharge them. Certain models even charge your phone in emergencies.

The Rain data-only network offers some of the best data rates around, at only R50 per GB. It also has an off-

peak monthly package of just R250. Get yourself a data-only SIM, and pair it with a MiFi device like the ZTE mobile router for just R800.

Streaming in the dark

These kinds of solutions are critical to surviving load shedding. Netflix and chill by candlelight will become a proudly South African tradition, and we're weirdly okay with that.

The solutions we mentioned above should get you started on the journey of becoming less reliant on Eskom's supply. The more we learn about implementing alternative energy on a budget, the more we understand how to become strong, independent Saffas.

ICONIX FLAMINGO SOLAR STANDING LIGHTS

We're going to stretch things a bit and say that a South African house is absolutely not complete without a solar flamingo light. Just look at it!

This Flamingo Solar Light is a must-have this winter season. It'll go perfectly with your old Christmas decorations and the old garden gnome that the dog got hold of. It measures just under 60cm tall and will

automatically light up once the sun has set. Thanks to a tiny solar cell mounted on its tail (yeah, that's what that is), it'll charge itself up throughout the day, and voila! A beautiful garden decoration that lights up for some reason. Look past all the shade and you'll realise that it's so corny that you have to possess one.

R230 / takealot.com

Pretty Stellar

Strange solar garden decorations may seem bizarre, but what better way to harness the power of the sun than by replacing useless decor with renewable options?

SUN OF A BEACH

Who knew we could harness so much energy from the giant burning radioactive ball in the sky? Well, everyone. Why aren't we doing it? South Africa is hit by a lot of sun beams, and we ought to be using it.

Step back Eskom, because *Stuff* is about to drop a hydrogen bomb: solar energy is far from free, but it is attainable. Which is why we've compiled some of our favourite solar products. You don't need to install twenty 100W solar panels on your tiny flat's roof to utilise the sun's generous power dump.

How do these panels make electricity? That's a good question. It's simple, really. Sunlight is actually just photons (or particles of light). When they reach the earth and collide with a photovoltaic solar panel, each photon loses an electron. This is because of 1) the electromagnetic nature of light and 2) the design of the photovoltaic panel.

These photons are caught by a semiconductor in the solar panel, which causes the conductor to absorb the photon's energy. This frees the previously captive electron, which then starts moving along the direction of the electric field, generating an electric current.

Now you know how those weird plates function. Kinda. This whole process happens in one cell, and panels can have up to hundreds of cells. More cells = more energy. More cells also mean you're spending more moolah. Larger panels can cost deep into the tens of thousands of rands.

You don't necessarily need gigantic panels to make the most out of the sun's offering but it sure will help attract a mate in this electricity-scarce climate. Now, how about a solar-powered keyboard? What about a solar backpack? Let's unpack all the weird and wonderful solar tech you might not know you want.

KNOW THE DIFFERENCE

WHAT'S YOUR TYPE?

There are two types of solar panel: polycrystalline and monocrystalline. The main difference is the type of silicon solar cell they're made of. Monocrystalline ones are made

from a single crystal of silicon, while polycrystalline ones are made from many silicon fragments melted together. Mono panels tend to be higher quality, but also more expensive. Choose wisely.



NOW ADD THESE



Solar Kettle

The kettle taking too long for your liking? Check this thing out – it'll boil 500ml of water in just 60 minutes. That's one hour of sunbeam-absorption to heat up enough water for two cups of coffee (if you're generous). Just pour the water in, close the lid, open the wings and position it facing the sun. Let's be honest, it's a fancy flask if time is on your side.

**R500 /
takealot.com**



20m Solar Fairy Lights

Nothing will up the quality of life in your garden like a string of damn fairy lights. Don't have a garden? Spread them around your flat. These also charge using the sun's beams, which means they won't run out. And they'll create a lekker atmosphere outside when load shedding hits. Fairy garden braai night? We're in.

**R300 /
takealot.com**



Solar Lights Waterproof Motion Sensor Lights

Doubling as an outside light and a security measure, every house ought to have motion-sensing lights. These 100-lumen waterproof lights work purely off solar power. You know what that means? No more struggle laying cables through windows and you won't trip over the dog during load shedding.

**R275 /
takealot.com**



Solar Charging Outdoor Backpack

We are nearing apocalyptic preparation levels here, but who doesn't want a backpack that can charge your things? No-one, that's who. The ECEEN 602 solar backpack will keep your iPad charged while you're on a hike. Just don't take a pic with that iPad. Rather use a proper DSLR camera for that.

**R700 /
takealot.com**

NOW ADD THESE



Macally Solar Wireless Keyboard

Another gizmo you never knew you wanted (or existed). The Macally solar keyboard is just what you need if you're used to setting up your PC (or iMac) in direct sunlight. Because who doesn't do that? Apparently, the 600mAh rechargeable lithium-ion battery lasts over 2 months in total darkness. Riiight.

R1620 /
takealot.com



Waterhouse 5m Solar Water Pump

Instead of heating water, this doodad harnesses solar energy to move water from one point to another. Using a 30W solar panel (that stays out of the water), you can power the 20W pump (that can be submerged). It's got a Max Flow Rate of 12L/min and a Max Static Lift of 5m. So it'll be able to lift your mother?

R1190 /
makro.co.za



Red-E Solar PowerBank

Most solar power banks have a low capacity and ineffective solar cells. This solar power bank has a capacity of 8000mAh, fed by four solar panels that fold open. It's got dual output ports, so you can charge two items at once, and LED indicators to show when it needs more sun-juice. You'll also look cool using it.

R700 /
outdoor
warehouse.co.za



Solar Powered Tyre Pressure Monitoring system

This is the height of tyre-pressure monitoring tech, especially if you're driving a 90's Camry. Just install the external (or internal) pressure sensors in each tyre, and prop the solar display on the dash. The system will monitor tyre pressure in real-time and notify you on the screen when pressure is off in one tyre.

from R800 /
takealot.com



LOW-PRESSURE 100L SOLAR GEYSER

Guess what? The sun doesn't just heat solar panels. That burning ball of radiation bliksems just about anything down here with its heat.

Especially if you find yourself stranded in the middle of Kathu in Limpopo mid-December. So it's safe to say it can easily heat water if TheSunPays' low pressure solar geyser is placed strategically. By strategically, we mean just about anywhere in South Africa. If you plan on minimising your reliance on

Eskom's electricity supply, get yourself a solar water heater and geyser. It can be thermostat-controlled and holds 100L of hot water. You may have lukewarm showers on rainy days, which will suck. But replacing the most power-demanding appliance with a 'greener' option sounds good. This particular one can take a standard thermostat or smart controller too.

R3300 /
shop.thesunpays.co.za

PATIO SOLAR OVEN

With all the load shedding that's been happening, you're probably all braaied out (like that's ever gonna happen). But if you're keen on a change, this Patio Solar Oven can cook some bobotie or lasagne at 175°C during summer.

In winter, you'll get it up to 155°C using the power of Ra. These are made locally, so are optimised for South African conditions. The curved mirror upper lid can be manipulated to focus its reflection directly on specific pots. These come in three versions: basic, comfort and deluxe which comes with a backup power inverter and battery for cloudy day cooking.

R3150 /
sungenius.co.za



MPOWERD LUCI INFLATABLE SOLAR LIGHT

Bet you never thought you needed an inflatable solar light? Well, MPowerd thinks you do. Just like its nonsensical name, the inflatable solar light is kind of cute in its absurdity. It's also small and easy to store.

Need a tiny fake candle for 18 hours? This one'll do just fine. The Luci Light has three settings, one of which will imitate a candle flicker, the next a low-powered option that'll last the longest, and the last 'high power'. Setting it on 'high' will decrease light time, but increase intensity. It'll also take a full seven hours to fully

charge, so we'd recommend positioning it in a window or outside. The South African sun will do its thing and the Luci Light should last through the night. It's fitted with a 350mAh lithium-ion battery and its got an IP67 water- and dustproof rating. You can even submerge the Luci Light up to 1m, and being inflatable, you can easily float a whole bunch of 'em on the pool at night and have the most bougie pool in the neighbourhood. At R340, though, they're a tad expensive to hoard.

R340 / takealot.com

A Floater

The Luci Light is filled with air [from your lungs], which means it has the ability to float. Don't hold us accountable if it breaks, though.



Impress 'em

Instead of sending flammable Chinese lanterns into the sky, position a few Luci Lights around your garden for the same effect.

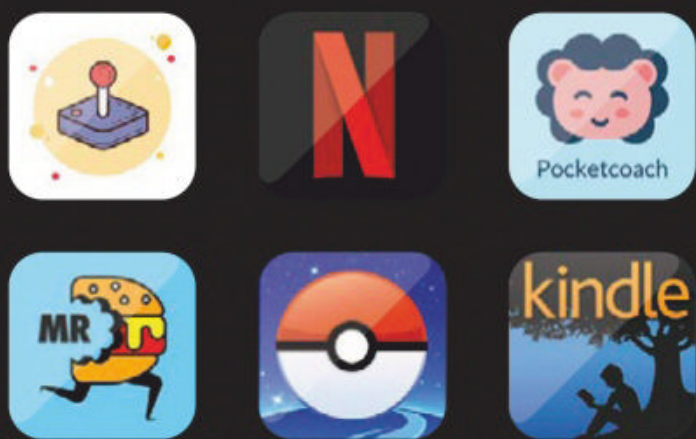


● Apple Arcade

Apple Arcade is maybe the best deal if you're looking for some light entertainment to keep you busy when the lights go out. Paying a small subscription for an enormous collection of quality games you can download whenever you want means that, whether you feel like *What the Golf?* or *Grindstone*, you'll always have something to play during load shedding. Gaming isn't just for consoles anymore.

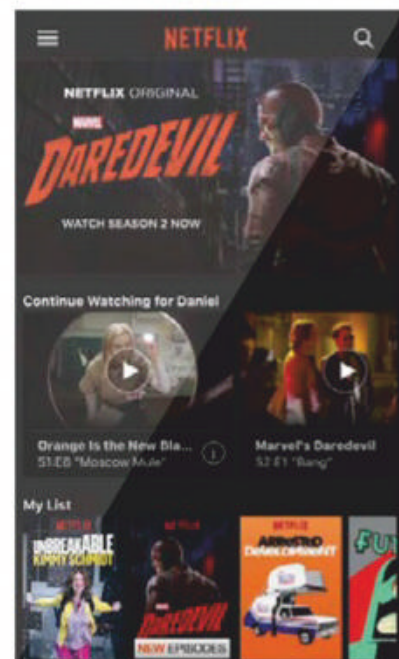
R85pm / iOS

Mini meme



WHAT WE DO IN THE SHADOWS

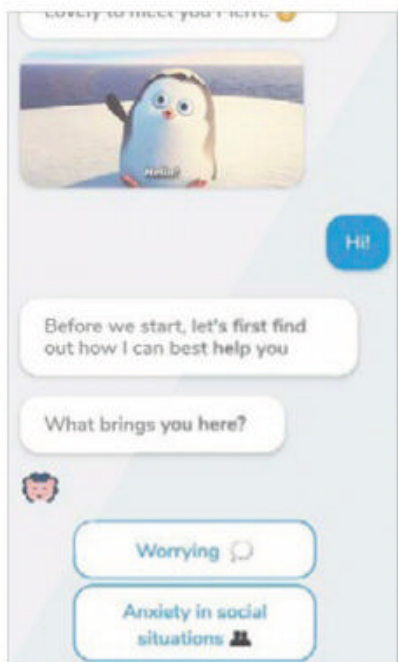
Just because your house is powerless doesn't mean you have to be. Keeping these handy apps around will make your life much easier during load shedding



● Netflix

This doesn't really require an explanation. Only a fool would scoff at the idea of downloading literally hundreds of movies and TV series on your mobile device. The joy of Netflix isn't solely the ability to throw something on and chill but the chance to prepare for several hours without electricity with some highly acclaimed series and movies, all for a reasonable monthly subscription.

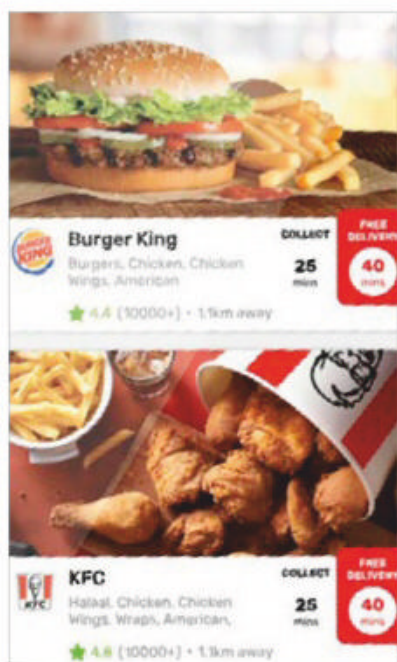
from R99pm / Android, iOS



● PocketCoach

We're living in a modern age of constant distraction. When those flashing lights and images disappear you're left with the scariest thing in the world: Your thoughts. While you have the downtime, practice some mental health care, helped along by the professionals at PocketCoach. Achieve peace of mind while sitting in the dark with only your fears and anxieties and nothing else to do!

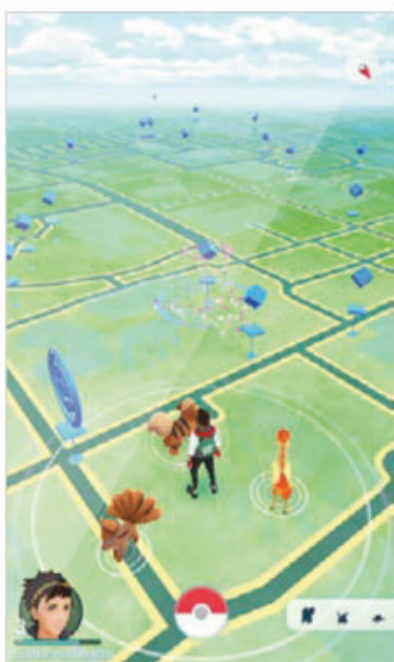
Free (IAPs) / Android, iOS



● Mr Delivery

Peak disappointment is arriving home after a long day at work, turning on the oven to make a delicious supper and realising load shedding has taken away your one solitary pleasure. Mr D knows all about that crushing reality (and that one secret you dare not tell anyone) so whenever the power dies and you need to snack, make sure you have the best food delivery app installed.

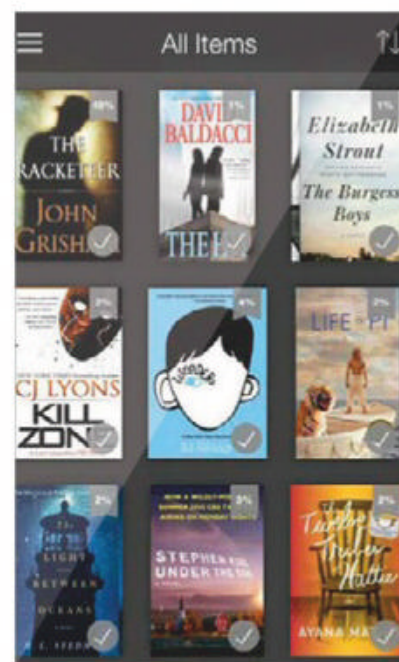
Free (IAPs) / Android, iOS



● Pokemon GO

Pokemon GO has grown into a tremendous game since 2016 and is arguably one of the best titles available on mobile devices. Load shedding is a great excuse to stand up, stretch your legs and get out of your dark house a little. *Pokémon GO* is just the incentive to give you that extra push out the door. Maybe catch some electric types while you're at it and see if you can trade them with Eskom?

Free (IAPs) / Android, iOS



● Kindle App

Your mother used to say, "Reading in the dark is bad for your eyes." She may have confiscated your torch but she never expected smartphones. The Kindle app is the perfect solution for bookworms looking to get lost in a novel without worrying that fading light will make their hobby impossible. The app is free, all you need to do is buy your own digital books! Mom would be proud.

Free (IAPs) / Android, iOS

ANKER

Charge Fast, Live More



 POWER IQ 2.0

 QUALCOMM QUICK CHARGE

 VOLTAGE BOOST

 USB-C POWER DELIVERY

 MULTIPROTECT

soundcore by Anker

HEAR IT. FEEL IT



 Long Battery Life

 Superior Sound Quality

 Stylish Ergonomic Designs

 IP rated Water Proofing

LOAD SHEDDING SURVIVAL GUIDE

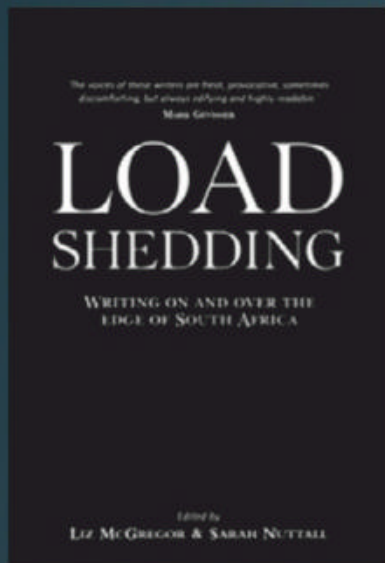
Like life, we can't control what Eskom is doing to us. What we can control is how we react to the situation. This collection of items will put the power back in your hands... so to speak.



Energizer Vision HD Focus

There are two versions of this 1000-lumen torch. One uses six AA batteries, the other packs a rechargeable lithium-ion battery. Get the second one and you'll keep the lights on for up to eight hours, which is a long time for a torch. Rugged design, IPX4 waterproofing and impact resistance means it'll survive the kids and more. It also works as a dandy camping addition.

R600 / makro.co.za



Load Shedding (or any other book)

South African writers contributed to this; a non-fiction tome dedicated to how South Africans live under pressure. It gets its title from the time it was written. The likes of Karina Magdalena Szczurek, Achille Mbembe and Imraan Coovadia penned these stories the last time load shedding was a thing. Or you could read something less depressing. We won't judge at all. We get it. **from R150 / takealot.com**



Zartek TX8 two-way radio

More suited for a trek to Lesotho than in the home, we're hoping these don't become essential. It's a sad fact that cellular towers are taking strain, and staying in touch may become a little... difficult. This Zartek pair has an outdoor range of about 6km but this extends to 30km, if you find a high enough vantage point. They're also handy for asking your partner to bring your sandwich from the kitchen. **R900 (for two) / sportsmanswarehouse.co.za**



Campmaster Thermoelectric Cooler

Anticipating an extended Eskom outage? This cooler will keep your chow cool, or even cold – it plugs into a 12V car or battery socket and keeps whatever is inside at 16° below ambient temperature. At 16° its internal temperature is 0° but at 32° it'll be just 16°. **from R1000 / campmaster.co.za**



Braai wood

South Africans regularly cook entire meals using traditional methods: wood, flame, beer. Making sure the grid is cleaned and the braai place is ready to go (and the beers are cold) is a responsibility in these trying times. Make sure you've always got enough fuel to tan some meat and you'll never go hungry. **from R45 / firewoodfarm.co.za**

TAKE THE LOW ROAD



Leisure Quip Ice Bricks

Ice bricks should be living in your freezer at all times, at this point. The added ice keeps your frozen stuff frozen but since it's all frozen, it's going to take a while to thaw anyway. No, your ice bricks should be stashed in your fridge as soon as (or, ideally, just before) the power goes out. It'll keep your bits cooler for longer. Of course, you don't have to buy anything. You can also freeze a few Buddy Coke bottles for the same effect. **from R25 (each) / outdoorwarehouse.co.za**

Surviving load shedding doesn't have to revolve around the gadgetiest of gadgets. Sometimes older solutions are the way forward



Stanley Classic Vacuum Flask

A handy way to survive load shedding is copious amounts of coffee and/or hot beverage of your choice. Boil a kettle prior to (planned) shedding, bung its contents in a vacuum flask and you're set for hours. Stanley's range keeps liquids hot for around 12 hours and range in size from 500ml to 2l. Some versions even feature a coffee press, if you simply must have an espresso. **from R870 / yuppiechef.com**



Oztrail Kerosene Hurricane Lantern

There are many ways to light up your life when the lights are out. This one involves kerosene, because you don't have to worry about charging it. Oztrail's lamp will last up to eight hours on a tank, which may just come in handy if Stage 8 ever makes a regular appearance. Add some citronella oil to repel the mozzies, though this isn't much of an issue in SA as the winter months begin to make themselves felt. Also: take it camping when the lights are on. **R170 / outdoorwarehouse.co.za**



Kroma 9 LED Camping Lantern

Camping lanterns are about R1800 a dozen. So expect to pay R150 a pop for one. And they're all over the place. If you're on a budget – and have a set of rechargeable D-cells at home – then check out Kroma's 36 lumen lantern. It'll keep the lights on, it's portable, and you'll spend more on batteries than the lantern itself. Or just grab a rechargeable Coleman CPX6 (R720, animalgear.co.za) for more light and longer uptime. **R160 / takealot.com**



LED Strip

Fancy a bit of DIY? It's very possible to keep the lights on with an LED strip and a 12V 7Ah battery – the sort you'd find connected to a home alarm system. A 21-LED strip handles lighting for an entire room while clever placement will prevent you from being blinded. Expect twelve hours of light from a charge. If you hope to use the setup more than once, grab the Lumeno Battery Buddy (R430, outdoorwarehouse.co.za) and you'll never be left sitting in the dark again. **from R300 / takealot.com**

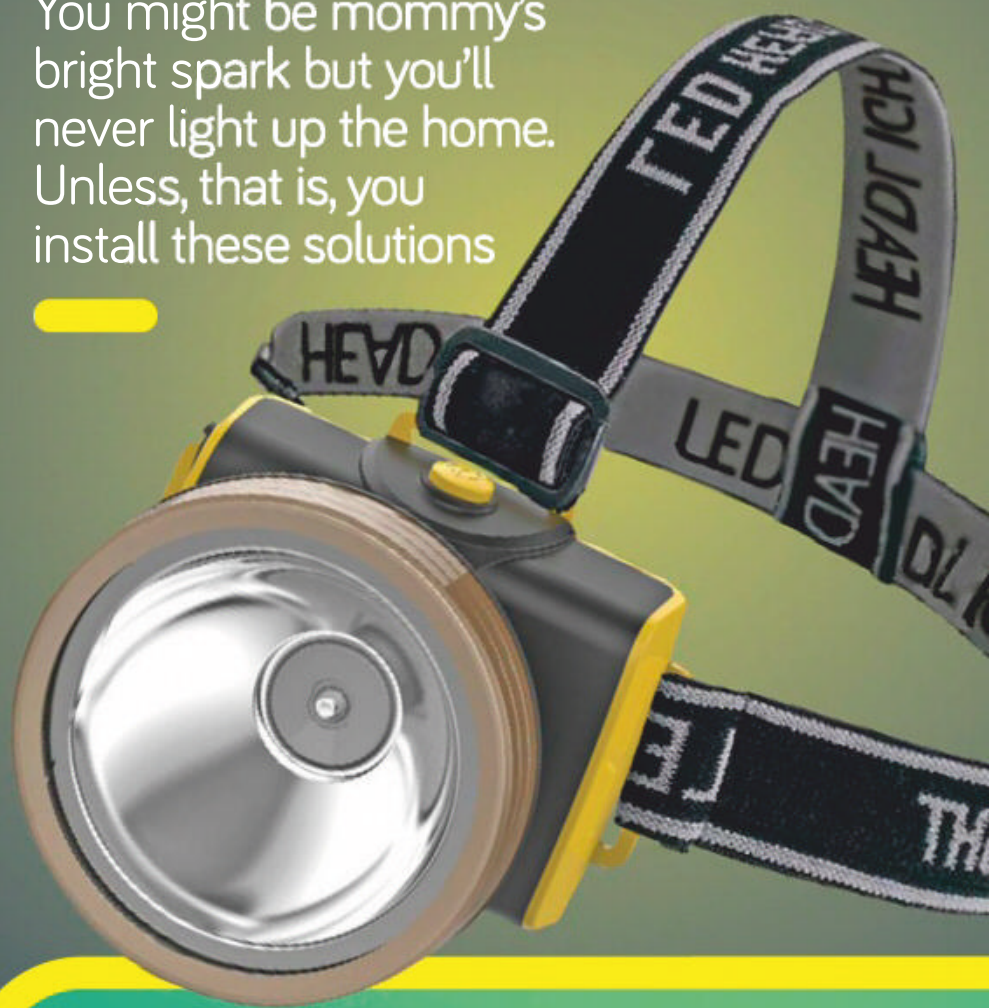


LED light bulbs w/battery

Anyone can outfit their homes with LED bulbs. You really should. They last longer and don't strain the grid quite as much. Be truly prepared with LED bulbs containing built-in rechargeable batteries, which then automatically light up when Eskom stops supplying your home with power. They're a pricy proposition but it's worth it for four hours of illumination in the darkness and the clout of being the only generator-less home on the block with lights. **R280 (4 pack) / geewiz.co.za**

LIGHT IN THE DARKNESS

You might be mommy's bright spark but you'll never light up the home. Unless, that is, you install these solutions



Nintendo Switch Lite

Spend enough money and get more than enough awesome. Nintendo's Switch Lite is the ultimate handheld video game console. Actually, it's almost the only handheld game console but don't hold that against it. The Lite has enough battery power to get you through the worst of times and games so awesome that you'll barely notice time pass. One look at *The Legend of Zelda: Breath of the Wild* and you'll be begging Eskom to turn out the lights. **R4 000 / store.nintendo.co.za**



Amazon Kindle Paperwhite

This isn't just an essential piece of load shedding survival gear, it's an essential piece of tech – full stop. The Kindle Paperwhite's side-lit screen lets you read in the blackest night, the battery last for weeks at a time, it charges up in short order and the newer versions are also waterproof. Finally you can read in a (tepid, thanks to Eskom) bath without worrying about drowning your reading material. You can do that with a book but you couldn't do it twice. **from R3 150 / circuitcity.co.za**



Huawei P30 Pro

Huawei's P30 Pro is a great phone, no matter what the Americans want you to think. And if you're worried about staying busy while Eskom's counting coal, this should be your prime choice of handset. The huge 4200mAh battery will keep you in downloaded Netflix and YouTube episodes or podcasts for hours. It should last through the longest outages. If this was the last Google-based Huawei, what a way to go. **R13 500 / takealot.com**

Typo Gamer Power Bank

We're not saying you should expect Nintendo quality here but where else are you going to find a low-resource handheld game console with a 4000mAh battery? There are 240 games installed on this console, mostly based on classic NES titles of yore. And if you're too young to remember the Nintendo Entertainment System, all you need to know is you need actual skill and enough patience to not hurl it across the room. **R500 / cottonon.com/za**

GamePro Ninox

If you'd like the darkness to really know it has been banished, you can always opt for a rechargeable spotlight. Ideal for home security, game drives, seeing the bottom of the ocean or landing planes on Christmas Eve, this 2000 lumen spot will run for two and a half hours interrupted. By then whatever you're pointing it at will have melted, so maybe don't use this little item to light up your interior areas. Unless you're checking under the bed.

R1500 / outdoorwarehouse.co.za



Solar Power Motion Sensor Wall Light

You can save on electricity and keep your back yard illuminated with solar-powered motion-detecting lighting. This one features a sun charged lithium-ion battery that will run for days at a time, meaning a cloudy day won't leave you in the dark. No, Eskom does that. Just... wipe the solar panels once in a while.

R600 / takealot.com



Eurolux LED Candles

Candles are an option and you might even use them but they melt. And set things on fire. Battery operated LED candles give you the same effect with none of the hazards. Some options let you choose your lighting hue. They run on AA batteries but low power needs mean you'll have light for longer.

R160 / leroymerlin.co.za

Eurolux Rechargeable Headlight 5W LED

There are many, many rechargeable headlamps on the market but we've settled on this one because it looks like it belongs on a miner in an old Warner Brothers cartoon. The fact that it's a) rechargeable, b) pumps out 800 lumens of light, c) and lasts for freaking ever (unless you drown it or something) also helps. But mostly we're keen on it because of the whole wizened prospector vibe. You can also get something conventional. We don't mind.

R200 / game.co.za



BOREDOM BUSTERS

Now that the essentials are taken care of and there's light in the home, it's time to find something to do



Ultimate Ears Megaboom 3

One of the weirdest things about load shedding is the quiet. We're used to the hum of appliances in the background and having that yanked away causes... issues. You can stave off the solitude with the right Bluetooth speaker. UE's Megaboom 3 pairs up to eight devices at the same time, has fantastic range and will keep you in blissful audio for up to twenty hours. So you'll charge it every third shedding.

R4 000 / takealot.com



Mecer Xpression Smartlife 10.1in

Mecer's 10in Xpression tablet has 16GB of storage, space for 64GB more and up to ten hours of uptime from its 6600mAh battery — all you need is a WiFi connection and Netflix and you've got an entertainment machine of note. Download shows before the power goes on holiday and you can catch up on your binging while 'repairs' are carried out.

R1850 / shop.mecer.co.za



Oculus Quest

This reality kinda sucks. Happily, you don't have to stay here all the time. The Oculus Quest has enough power to keep you in a dream world for most of an outage without a top-up. With a long-enough cable and the right power bank, you don't have to come up for air at all until the lights are back on.

R11 800 / makro.co.za



Midas Jump Starter

Something every South African should own along with their vehicle is a method for jump starting said vehicle. Car jump starters are very multi-functional items these days, their sealed lead-acid batteries proving useful to keep camping equipment running. This one's got a 20Ah battery as well as the most important bit – a 12V car socket, meaning you can operate all manner of useful gadgets when the Eskom says 'No'.

R1 540 / midas.co.za



Alva Single Burner Canister Stove

You're paying more for this single-plate gas stove and you're also resigning yourself to using proprietary (and disposable) gas canisters in order to get it working. That said, this is a very house-friendly solution to making food in the darkness – the flat design makes placing it on a countertop and actually stirring a pot a simpler task than crouching over a gas bottle trying not to knock the frigging thing over. That's what camping's all about.

R400 + R50 / takealot.com



Goal Zero Yeti 150

If you can afford (any of) it, Goal Zero power kit is the holy grail of camping/load shedding survival. This one charges via wall socket, car, or a variety of solar panels, has power for days with its 168Wh battery and a selection of ports. Charge via USB up to 2.1A, run 12V items via a car charging port or a 6mm jack, or even a 110V AC inverter port. It's not perfect for SA but it will do for now.

from R4 000 / animalgear.co.za

ADVANCED TACTICS

Multi-function tech is the way forward as Eskom drags us back into the dark ages. Go camping, either on purpose or because you were forced



Orion 5378 Paragon HD-F2

Your optical gear is only as good as your tripod and Orion makes some of the best heavy-duty kit available. The Paragon is rated for loads up to a 127kg like the one Celestron offers (R13 700), so it'll handle everything from an ST80 to an astronomy camera with ease. The two-way pan head makes direction a breeze and the quick-release shoe make setup and break-down a walk in the (dark, now we think about it) park.

R2 700 / amazon.com



Canon EOS Ra

Canon's astro camera has been purpose-built for people to point at the skies – you don't really want to waste this one on your Instagram photos. It uses Canon's RF mount, sports a 30.3MP full-frame CMOS sensor, and ships with its own optical IR cut filter. If that's all Greek to you, it means that it's a little more sensitive to Hydrogen-alpha, the light wavelength that makes up all the best nebula images. There are a few other astro-tweaks besides.

R39 300 / fotodiscountworld.co.za



Celestron Powertank Lithium

Running computerized equipment in the dark requires power – which is the point of this survival guide, really. Celestron's 86.4Wh battery pack will power even a high-end motorized telescope all night, with some capacity left over to charge your phone and light your way back to the car. It'll survive everything the South African elements can throw at it, and probably like the winter cold (when the skies are best) more than you do.

R4 000 / takealot.com

Meade Adventure Scope

If you only own one refractor in your life, make it an ST80 – otherwise known as a short-tube 80. The original 80mm f/5 'frac was made by Orion but all the big players have a version now. The Meade Adventure Scope 80 has the same glass as the pricier Infinity 80, just... cheaper. Use the savings to splurge on a better tripod and some eyepieces, though, because the ones here are crappy. Then enjoy amazing wide star fields with your 32mm plossl. There's also a cheaper 60mm version. Avoid it.

R2 200 / singerphoto.co.za

Leatherman Wave Plus

It's not all about power. Sometimes you need to get something done in the dark and, honestly, power tools aren't going to cut it. A Leatherman is what you need knocking around in your drawer or on a shelf, and the Wave Plus' complement of eighteen different tools should take care of most household emergencies. Just don't go poking any of the narrow metal bits in any sockets. You never know when the power's going to come back on.

R2 000 / capeunionmart.co.za



NI 12V Kettle

Yeah, you could use a gas bottle and a camping kettle but that's just so... so... bohemian. Rather than flame or smelly gas, pair a jump starter, high-end battery or an actual car with this 12v camping kettle. You'll always have hot water for some magic bean juice, no matter where you are. Obviously you can take it camping but you can also leave it at home, where you can laugh at your coffee-less neighbours as you take a soothing sip. Aaaah...

R300 / outdoorwarehouse.co.za



12V electric blanket

We really don't like having to shiver in the South African winter because of Eskom. A gas heater is a serious option (and you should use those anyway) but so is a 12V electric blanket. They are easy enough to snag from overseas. Plug in to a power source and snuggle up on your suddenly warmer couch with your partner. Isn't that much better?

R950 (pair) / amazon.com

Cadac Power Cooker + bottle

Time for a home-cooked meal, courtesy of some camping equipment. Cadac's Power Cooker will get everything from coffee to stews on the go, no bloody thanks to our state power utility. It's fully compatible with Cadac's 3kg, 5kg, and 7kg bottles. Not the 9kg bottle.

R189 + R530 / outdoorwarehouse.co.za



ON THE NIGHT

When the lights are out, city skies look amazing. Turn a negative into a positive and explore the night skies with this tech



Sky Watcher Dobsonian 10in

Dobsonian telescopes offer incredible bang for buck, so much so that you can go from beginner to advanced with the 10in model (there are graduations from 8in to 20in). The 10in f/5 light bucket uses a rear mirror and can be a little finicky when learning what to point it at. Take the time to learn and you'll be happily sitting out in the cold with a warm Thermos full of tea, a chart and an eye on the sky in no time.

R12 900 / futura.co.za



National Geographic 7x50 Binoculars

Getting started looking at the night sky is as easy as finding a dark sky — Eskom's taken care of that already — plus you'll need something to look through. A pair of 7x50 binoculars really bring out the detail in city skies. Allow fifteen minutes for your eyes to adjust and then simply... look up. The 7x mag offers users a lot of stability and a wide field of view.

R850 / animalgear.co.za



Astromania 1.25in Eyepieces

Stock telescope eyepieces range from average to crappy. Collect a few better secondary options with these 1.25in 5-lens planetary eyepieces. They provide a generous 58° field of view across a range of focal lengths. Snag the 25mm, 20mm, 15mm and a barlow lens.

from R1100 / amazon.com

QUICK CARD GAMES



Bump in the night
Love Letter

Maybe you're interested in poker but are always disappointed that there is never a beautiful Countess to court in the middle of the game. A simple, fast paced card game that hides a plethora of depth, Love Letter is the quintessential "easy to learn, difficult to master" party game.

R225 / nexushub.co.za



Going dark... darker... darker
Cards Against Humanity

Some things are a classic for a reason. Stop pretending that you and your friends are good people and devolve the conversation like the depraved animals you want to be. With the simplest ruleset imaginable, Cards Against Humanity puts you in touch with the dark parts of your humour.

R790 / thebigbox.co.za

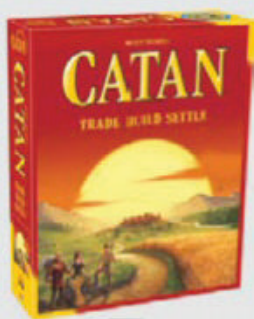


Feline energy
Exploding Kittens

You like explosions, right? And you *definitely* like kittens too, we're sure. Uniting the two nets you a hilarious, fast-paced game of chance and skill where the only thing standing between you and victory is drawing a detonating feline buried under piles of irreverent and silly cards.

R300 / takealot.com

CLASSICS TO PASS THE TIME



Got any coal?
Catan (Any of them)

You have all the ore you could possibly want, and I'm positively swimming in sheep. So let's maybe work together and stop Dawie from spreading his empire too far, eh? A classic game of resource management and alliances, Catan ensures some salty friendships and hours of fun.

R470 / takealot.com

UPVOTED
PARTY GAMES

Before we all had electricity (so... last month?) people didn't need power to have fun. All they needed was a board, dice, candles, and a hundred-page manual to keep themselves sane



Rising star
Springboks Monopoly

What couldn't be more South African than engaging in the evils of capitalism by buying and selling legendary local rugby players? All in an effort to build the best possible team to win the World Cup? Doing all of that while sitting in the dark makes this the most patriotic game on the list!

R400 / takealot.com

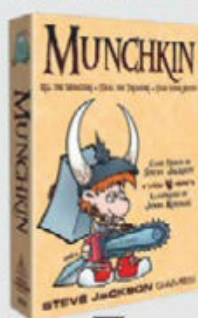
RUIN FRIENDSHIPS AND MAKE ENEMIES



Power games
The Resistance

The only thing better than playing games with your friends is lying to them as you convince them that you're not actually the person responsible for betraying the titular resistance. A game all about social deception and deduction, you'll either bond with your mates or stab them in the back.

R395 / loot.co.za



Gupta feelings
Munchkin

Get rich or make sure your buddies die trying is the motto behind Munchkin. A simple card game that can go on for hours depending on how spiteful you're feeling. There's nothing better than working together for that hoard of treasure only to steal it all for yourself at the last minute.

R495 / loot.co.za



Too soon?
We're Doomed

With the world on the verge of devastation, both in real life and in the board game realm, you and your friends are world leaders who need to work together to escape Earth. But there's only so much space on the spaceship to safety so you're going to have to choose favourites very quickly.

R770 / nexushub.co.za

HOW TO
ROLL

1 Read all about it

Some games just need more explanation than others, so figure out if you feel like paging through a manual before you start. Reading in the dark is never fun.



2 Friend or foe?

Not everyone is a gracious loser. Sometimes, the feeling of successfully working together is more satisfying than a hard-fought victory by yourself. Never throw your dice in rage.

Spooky stories to tell in the dark

Betrayal at House on the Hill

An experience that's best encountered exclusively by candlelight, Betrayal is a creepy game of ever-evolving circumstances. You'll always start off as teammates but as rounds progress you'll be forced into a corner as someone always turns to the dark side. An expansive list of scenarios and win-conditions makes this a game with infinite replayability.

R710 / takealot.com



3 Thinking with portability

Not everyone feels like lugging around a trunk of cards and figures just to play a game. A bigger box doesn't necessarily mean a more enjoyable experience.



4 Roll the hard six

More often than not, dice are an integral part of boardgames. They're also very easy to lose so try and keep some spares around in the event of a die going rouge in the dark.

WELCOME TO THE UPSIDE DOWN

**Now this is a story all
about how your power gets
flipped-turned upside down. And
we'd like to take a minute,
just sit right there...**



TRAILBOSS 2000W MODIFIED SINE WAVE INVERTER

This TrailBoss 2000W inverter is rated up to 4000W surge power, giving you a lot of headroom when it comes to starting up motors. Designed for use in the wild, there's over- and under-voltage shutdown, as well as options for thermal, short circuit and overload protection.

R3 500 / outdoorwarehouse.co.za



SAMLEX 1000W PURE SINE WAVE INVERTER

Meet the Samlex 1000W pure sine inverter, which is rated up to 2000W surge power. Overheating and short circuits shouldn't kill it and it'll also shut down to save its batteries or if it's overloaded.

R4 000 / futura.co.za



NATIONAL LUNA BATTERY MANAGER KIT

You've got the inverter and (hopefully) the batteries. If you haven't got a box with all the bits in, you can also connect the battery yourself. National Luna's kit has what you need for the job.

R2 300 / outdoorwarehouse.co.za



102AH DEEP CYCLE BATTERY

What's the point of an inverter without a battery to pull power from? A large 102Ah deep cycle is pricy and weigh in at 25 kilos a pop – but it's better than waiting on Eskom. Get as many as you can.

R3 200 / leroymerlin.co.za

**NOW
ADD
THESE**

We've spoken a whole lot about solar power, generators, batteries, and all manner of things we can connect to them but there's another essential item in the chain we haven't covered yet. That's the humble inverter.

What is an inverter? Sounds... painful.

It's not painful at all, unless you stick your tongue in the wrong port. An inverter does something very important – it turns DC current, which lives in your battery, into the AC current that normally comes of the wall.

You've encountered them before, we're pretty sure. They live inside solar power and battery backup gear, and you can also buy them as standalone units at most any SA camping or 4x4 store. You've seen them. Trust us.

Great. So how do I choose an inverter?

Well, should you require one, you would choose an inverter based on your power requirements. If you're trying to run 5kW of appliances, you'll need an inverter capable of handling the load. So to speak. And they're also subject to startup wattage (p38), so you need to factor that in. It's no good buying a 1000W unit if you need 2000W.

Is that it? Are we done?

Nope. There are also two types of inverter – modified and pure sine wave. Pure sine inverters tend to be more expensive, but that's because they supply the same sort of power Eskom used to. You can opt for modified sine wave, which uses a different, lower-quality wave form – yes, such a thing exists. If you're running a computer, radio, medical equipment, or anything with a motor, pure sine is essential.

EATON 9SX

from R9 000 / netconfig.co.za

**That's an awfully nondescript black box.
What's it do?**

It keeps you employed, is what it does. This is an intelligent UPS system, one designed to keep an eye on the power situation and adjust accordingly. It uses something called double-conversion topology to monitor and tweak voltage and frequency. All day, every day.

You just made that up

Nope. We wouldn't lie to you. It'll regulate the power travelling to your essential bits, which is great because Eskom's a little flaky at the moment. It's also designed to run for longer than normal UPS units. That's because it's was initially created for network and server environments which – while a real snooze-fest when it comes to design – demand high reliability. Take down the wrong server the wrong way and you might actually be fired. Out of a cannon. Into a wall.

So it's going to keep my computer going then? How about the rest of my tech?

That... really depends. As much of your tech as can be powered by C13 sockets – so your computer and monitor, certainly. Up to three of them, with the 900W UPS. Start tacking on things like the TV or kettle and you're draining the battery in ways it was never meant to drain. Like we said, it's supposed to keep you employed. You don't need creature comforts in order to work. The way South African workplaces seem to discourage that seems like it'd be obvious.

So... why do I want one?

If you do your work on a computer, as we suspect you do, and you don't make a habit of saving everything every two minutes (as we suspect you do), then it's not a case of wanting one. It's more about needing one. Load shedding is somewhat predictable but there's no telling when an errant jellyfish is going to take down half the country's electrical capacity on exactly no notice.

Tech specs

Output power 900W

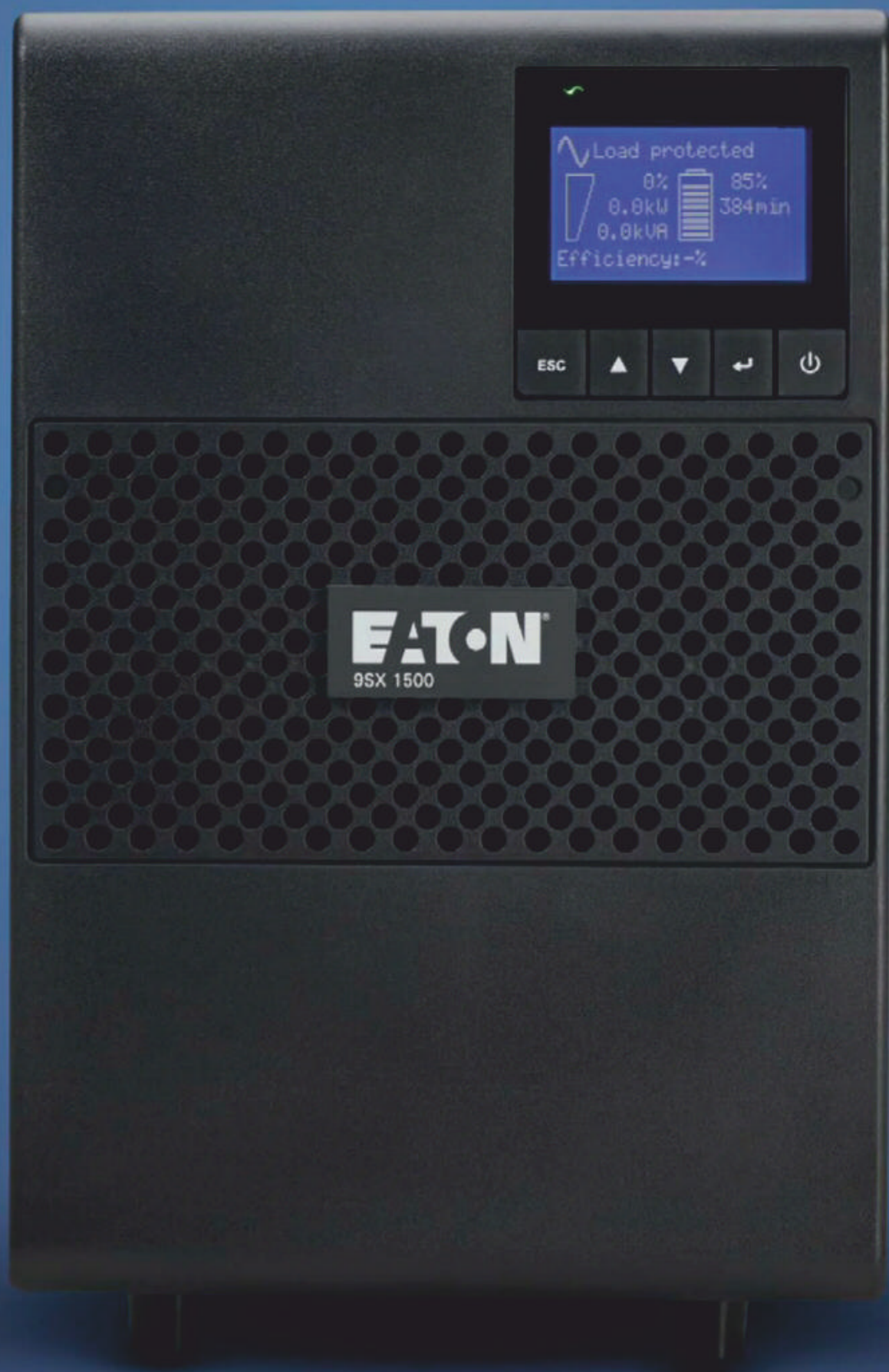
Output connections (AC) C13, C14

Format Tower

Topology on-line double conversion w/ PFC

Noise 41dB

DESIGNED TO RUN
FOR LONGER
THAN NORMAL
UPS UNITS



3 OF THE BEST

Silent night inverters

When your neighbours home is lit up like a Christmas tree but you can't hear a whining genny – they've probably got one of these in their crib



Aexpert 3000VA Inverter + Battery Kit

R11 400 / geewiz.co.za

What's the story?

Overall the largest of our bundled electricity trio, the Aexpert 3000W pure sine inverter from online retailer GeeWiz includes dual 100Ah 12V deep cycle batteries in a case. There's also a 50A PWM solar controller in case you've taken our advice and gone solar (p46). Eskom can go jump now.

Is it any good?

This is as good as it gets for a no-thought power-up solution. You've got the option to plug in solar power, it'll run more hardware at once thanks to its oversized inverter but there is a small downside. The dual deep cycle batteries won't last as long – that's down to the increased draw caused by adding more appliances to the mix.

KEY SPECS

Inverter type 3000W Pure Sine
Batteries 2x 100Ah 12V
Dimensions 50x39x38 cm

Stuff says ★★★★★

Go home and go big with this inverter – but invest in more batteries

Goal Zero Yeti 1400 Portable Power Station

R30 000 / animalgear.co.za

What's the story?

Goal Zero has some seriously good off-grid tech in its stable. One of the largest locally-available all-in-one options is the Yeti 1400, a 132Ah battery fronted by a 1500W pure sine inverter. It's compact, stylish, and it's also very definitely imported. Plus, you will want all the accessories.

Is it any good?

Yes and no. Yes in that it's small, powerful, completely set up and mostly idiot-proof. No in that its power output is designed for Americans – the main plug port is 120V AC, while South Africa appliances are designed for 220V AC. On paper it's freaking amazing. In practice, it's a little less so. If only someone would make a wholly SA version of this.

KEY SPECS

Inverter type 1500W Pure Sine
Batteries 1x 132Ah 10.8V
Dimensions 25.7x38.6x26.4cm

Stuff says ★★★☆☆

If you favour style over function, travel off in search of this Yeti

Mecer BBONE-024S+ 24V Battery Centre

R8 500 / mecer.co.za

What's the story?

Think of this as your little battery-powered buddy. Rather than using a generator to supply power to your goods, you leave this battery centre connected to a wall socket. When the power cuts, it'll switch over to battery power and continue as normal. It could be simpler, but not much.

Is it any good?

It's good enough for non-sensitive equipment. Mecer's running two 100Ah batteries over a 1440W modified sine wave inverter. Remember how to calculate the power draw of the appliances you want to run (p38)? You need to do the same here. Just don't run any medical gear or anything with an AC motor on it.

KEY SPECS

Inverter type 1440W Modified Sine
Batteries 2x 100Ah 12V
Dimensions 50x39x38 cm

Stuff says ★★★★★

The one if you're all about power but don't like fumes

CUTTING THE CORD

The sun giveth, and Eskom taketh away. Here's how to cut the electrical cord and rely on your own power

If you haven't yet, it is about time to start researching alternative energy solutions for your house. The future of coal based electricity in South Africa looks dire indeed. And while Eskom decides who gets to flip the switch when load shedding strikes, the sun is beaming down free energy from above.

Just to bring you into the loop: the sun emits about 3.86×10^{26} watts of energy. So add 24 zeros to the end of that number — that's how much energy the sun beams out at any moment. Although most of it floats out into space, about 1.74×10^{17} watts hit the Earth.

It makes logical sense for us to harness this energy, right? Instead of relying on a grid that could collapse at any time, it's not that hard to implement a solar solution at a residential home. The only thing is: the initial investment may look daunting.

CRUNCHING NUMBERS

First things first. We need to do a wee bit of math to get to the actual cost of installing solar power at any premises. You'll need to figure out just how many kilowatts your house uses on a daily basis.

The national average monthly consumption for a typical

household, according to Eskom, is around 600kWh. Kilowatt hours are a unit of measurement, and express power used, multiplied by time. There's a relatively easy way to figure this out: check all of your appliances — they should have consumption numbers. If it's listed in watts, don't panic. There are 1000 watts in a kilowatt.

Keep in mind that your TV isn't on all day 'erry day (or at least we hope not). So, you'll need to calculate its watt-hours by taking the number of watts it consumes and multiplying it by the number of hours you use it.

Let's just do an example for interest's sake: if you use a 60 watt light bulb for two hours a day for 30 days, you have used 60 watts of power for 60 hours. This means that 60 watts multiplied by 60 hours, is 3600 watt-hours of electric energy, or 3,6 kWh.

Another, hassle-free way to do it is by reading your power bill at the end of the month. But with the power utility cutting corners by doing estimates, you might be bamboozled by the use numbers. We recommend doing it the old-school way and reading labels and/or manuals.

SHAKE UP YOUR BEHAVIOUR

If you've just realised that 1) you're bad at math and 2) you're using ►





THE SUN

The Sun is the only star in our solar system. A flaming ball of hydrogen and helium, our star will eventually consume planet Earth when it switches from burning hydrogen in its nuclear fusion reaction to burning helium. We've got some time, though — it'll be about 130 million years before Earth is burnt to a cinder by outside forces. In the meantime, the Sun is our planet's main source of external energy. When it's not trying to fry our planet with ultraviolet rays, plasma flares or solar flares (which are sent our way in the form of radiation energy), that is. And we use it for drying washing, powering batteries, changing skin tones and telling the time. Humans are very, very strange indeed.

We're not going to lie, though, getting an inverter and a couple of deep-cycle batteries isn't going to be cheap

way too much power, you'll have to make a few power consumption changes. This is very true if you plan to leave Eskom's monopoly and do things your own way.

You'll need to kick a few of those habits. First, the sun is only out for part of the day, obviously. So you'll have to schedule most of your consumption during peak sunlight hours. You can also replace certain devices with lower-power devices, like using LED lightbulbs in lieu of the incandescent ones we're used to.

For those dark times sans sunlight, you'll need items to store the power the solar system has generated throughout the day. So excluding expensive solar panels, you'll need some other expensive things called deep cycle batteries. And an inverter.

Just know that any one of these could cost you upwards of R3 000. You'll need a deep cycle battery or two (depending on the output you want), and an inverter. An inverter is a thing you need to change DC current from your battery into AC current that can be used to power your house.

If you're not an electrician, you better call your cousin from Brakpan to come and help you set this up. He should be able to explain to you how much power output your inverter provides — so you'll know exactly how many devices you can run on it. You may get more than a few appliances running on one of these, depending on the size inverter you've purchased.

We're not gonna lie, though, getting an inverter and a couple of deep-cycle batteries won't be cheap. You can buy pre-built units for around R6 500, but if you're going all-out you could find yourself spending anything from R15 000 on your inverter (pure sine, for preference) and between R3 500 and R12 000 per deep-cycle battery. But at least you won't have to listen to a generator groan when the power's out.

Above that, the solar panels themselves will cost a whole wad more. This is probably what is stopping you from converting to solar. Right? We get it.

"IT'S AN INVESTMENT"

We're sounding like financial advisors again. But, installing a solar setup should be seen more as an investment than flipping the bird to Eskom, especially considering the typical solar panel installation (with a 4–7kW peak output), can cost anything between R60 000 and R100 000.

If you do all the fancy math stuff, that translates into roughly R1.30 per kWh for the next 15 years. Which is impressive considering you could pay as much as R2.20 per kWh on the grid, depending on where you live.

Using the previous example of 600kWh a month, the house is using around 20kWh per day, which is relatively high. If you're not prepared to pay upwards of R200k for a solar system, the first step is to get your consumption under control. Push those numbers down, fam.

We're big fans of wind power too. However, we're not going into too much detail because it's a bit difficult to install in the back yard.



SOLAR PANELS BY NUMBERS

**8400
MW**

SA's solar capacity is expected to reach 8 400 MW by 2030

20-25 years

Solar panels are built to last between 20 and 25 years

1447
MW

The largest solar farm has a 1447 megawatt array

200+ homes

1 megawatt
can supply 200+
households
with electricity

4
hours

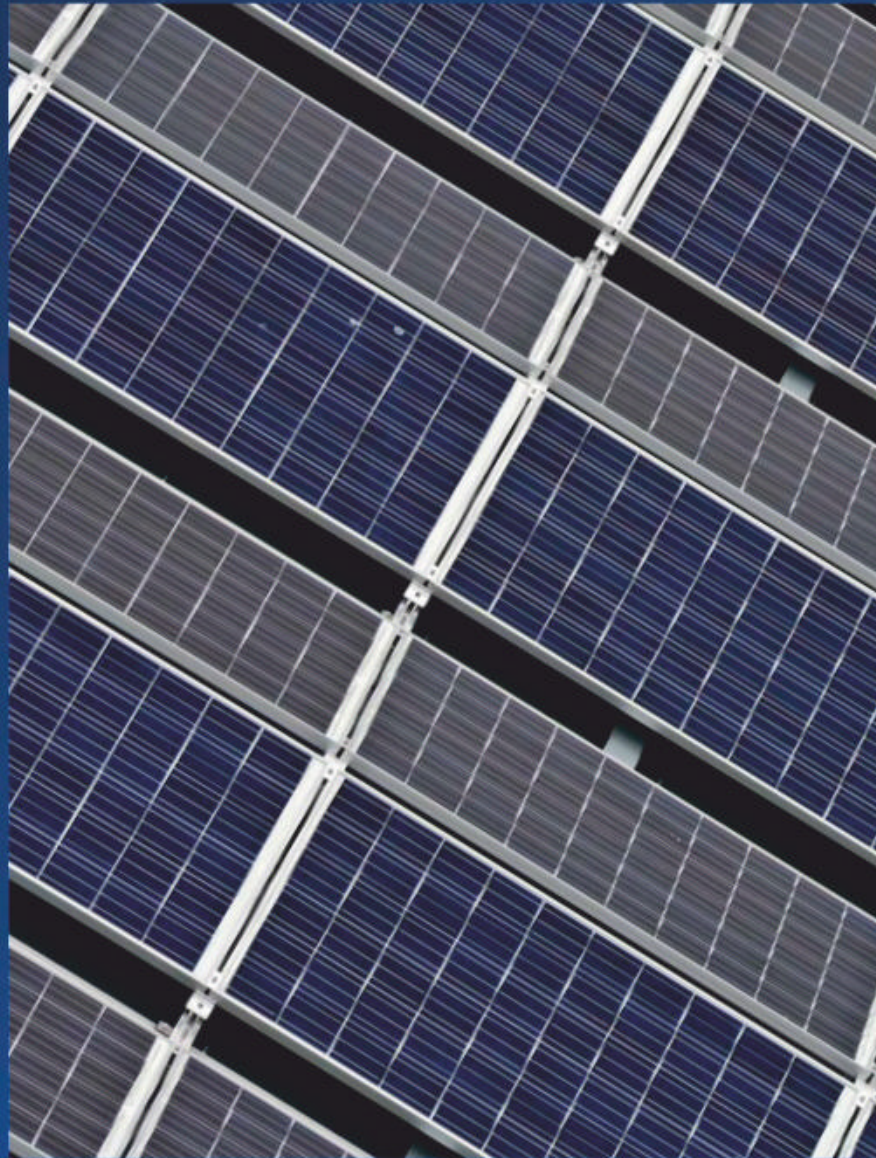
**Solar panels
need at least
4 hours of
peak sunlight**

60%

The average cost of solar panels has dropped more than 60% in 10 years

51.4 billion

It would take 51.4 billion 350W solar panels to power the world




Let's say you don't currently have R100k for a solar system that can handle your power needs. There are options. Many banks are approving loans to help people implement solar power in their houses. How very nice of them... While this is an option, more debt isn't necessarily what we want.

Some alternative energy companies in SA offer loans, where you'll pay a monthly fee to have a system installed. It's just a different way to finance matters.

This method is for those blessed with self-control. The faint-willed will suffer, but the payoff is worth it.

A solar setup can also be installed in segments, which means you cough up money as you save up to install. This way you'll convert your house stukkie-for-stukkie. This allows for more efficient use of your budget and time. As pieces of tech start running off solar power one by one, your contribution towards power utilities should drop.

You can get a 1.2kVA system, which has an output of almost 1kWh, for R10 000. Get one of these every two months for a year and your output is already at 6kWh per day. That's a decent start and every little bit you can do to get away from Eskom helps. 

SHAKE IT UP

1) GENERATOR EX

1 You've got your renewable power patch, now you can burn some fossil fuels to make up for the top-up you need when it's overcast outside. Yeah, solar won't work without sunbeams. A generator will set you back anything from R2 500 to R100k (p36), but nothing will take away the pure resentment your neighbours feel when you have a working stove and they don't.



2) SUCH AN ENVIRONMENTALIST

An easy way to cut down on coal-powered Eskom current is by converting a few big items. The Zero 6-Plate Gas Stove is a perfectly proper replacement for an electric stove at R4 765 (livestainable.co.za). A solar geyser is also a viable option. You can get a Low-Pressure 100L Solar Geyser for R3 290 (shop.thesunpays.co.za).



INSTANT UPGRADES GAS BOTTLES



**FIRST ADD
THESE...**



ONE CADAC SWIVEL REGULATOR LOOSE

Got no control over the kids? At least you'll have some control of the amount of gas you let through using this swivel regulator on your gas bottle. Nothing says 'load shedding steaks' like a carbonised bit of meat and a trip to have the bottle refilled. The guys at the BP up the road will know your name in no time.

R150 / makro.co.za

TWO GAS LEVEL INDICATOR

There's nothing more annoying than throwing a lekker tjoppie on the gas braai and realising the gas is finished. Get yourself a gas level indicator that sticks to the outside of the bottle magnetically. The level indicator is easy to read and will work in real-time while the gas bottle is in use. It's a small investment, but totally worth it. Thank us later.

R70 / outdoorwarehouse.co.za

THREE TRIGGER-LITE GAS LIGHTER

Everything on this page is filled with gas. Hopefully, you're not. The perfect braai day with the buds is so easily ruined when the South African wind blows out every. Single. Match. You. Try. So get a gas lighter. It's more of an investment than a luxury, especially because load shedding will increase the braai rate at home.

R50 / game.co.za

NOW TRY THIS...



1 BOERE ITALIANO

While our Italian is questionable, we know how to braai. What do you get if you mix the two? A gas bottle attachment pizza oven. The Cibo Gas Pizza Oven is the perfect addition to any offline kitchen because it means we can all make boerewors and chorizo thick-base pizza smothered in mozzarella. The Italians have won this round, but we'll put our own twist on it for good measure.
R4 000 / stingray.co.za



2 LITTLE BRAAI, BRU

You won't take your Weber everywhere, right? You will? Okay... but the Cadac Safari Chef 2 is a proper small braai system that includes four different plates and has its own four feet. Don't lug your whole braai to Johan's river get together if the gas bottle is filled. Because the Safari Chef has attachments for your steak, Johan's wors, your wife's fish and Karen's vegan sausages.
R1 340 / takealot.com



3 KAREN'S NOT INVITED

Karen's vegan worsies get stuck to the grill, so we'll have to make 'em in a pan. Honestly, if you've got an Alva Double Burner and Grill Stove, you can sell the stove in your house. It's useless now. This gas stovetop features two stainless steel burners, control valves, anti-slip feet and a grill function. It's easy to clean and won't let you down, as long as you keep that bottle filled up.
R1 400 / stingray.co.za



4 POTJIE THE RIGHT WAY

No gas-setup is complete without a potjie cooker attachment. The Cadac Potjie Cooker Top fits all potjies from no. 2 or no. 3 sized, 3-legged cast iron pots. And it can be fitted onto any 3kg-7kg gas bottle and is one of the sturdiest potjie holders around. Pro tip: Leave the oxtail on for as long as Karen moans that she has nothing to eat. Also never stir a potjie.
R300 / takealot.com



5 SKOTTLE OVER HERE

When it comes to skottels, we don't muck around. Yes, you can find a small one for cheap-cheap. But we're going to need a proper plate when the whole block pitches up after smelling the lekker bacon and eggs. The Alva Braai Hotwheel 3 Burner comes with its own bag and perfectly distributes heat. You can't go wrong with a cast-iron plate for breakfast deliciousness.
R1 100 / kloppers.co.za



6 NO KITCHEN NEEDED

We're not saying you don't need a kitchen. We're saying you'll notice yourself using it less and less if you've got this setup. The Total Premium Three Pot Gas Boiling Table looks sleek, has three burners for pots or pans and stands up tall enough that you don't feel like you're camping. The plates should fit any type of pot or pan you can throw at it. Don't actually throw your pots.
R2 000 / ecodpot.co.za

A GOOD BRAAIER NEEDS...



THE TOOLS

Just invest in a good kit of braai utensils. Your oupa's tongs and mom's baster won't do it anymore. The Alva 21 Piece Wood Braai Tools will set you up for good steaks.
R460 / kloppers.co.za



CLEAN IT

A good braai always needs a good clean. Get yourself an Alva Large T Brush and give your grill a spa treatment.
R120 / kloppers.co.za



SHOOT GAS

If you go old school, use a Turbo Gas Fire Lighter stick to get the charcoal or wood going. No more sukkel with firelighters.
R325 / ecodpot.co.za

BETA YOURSELF

THE NIGHT'S WATCH

The night is dark and full of terrors when Eskom turns the lights out, but you can still keep yourself busy with a little planning. **Stuff** watched the wall so you don't have to

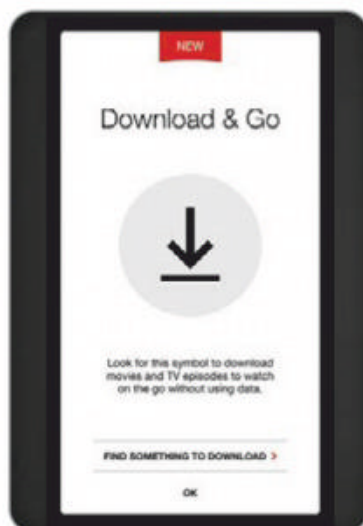
THE BASICS

■ Ready Player One

No matter what you're planning to do when the power's gone, it doesn't make sense to sort it out after the fact. Snag Eskom Se Push (Free, Android, iOS) or another load-shedding tracker so you know when the blackout's coming. Then, when you're on schedule, make sure all your devices are fully charged, your downloads are done, and all updates are installed before the darkness descends on you and yours. It never hurts to be overly prepared.

■ Take your tablets

Grab yourself a tablet or smartphone, fire up Netflix and pop on over to the Available To Download option. Here you'll find everything that can be viewed offline.



If Netflix made it, it's here. There's a wide selection of other bingeable content but not everything is licensed for offline viewing. You may have to watch some stuff when the WiFi's working as it should. The horror...

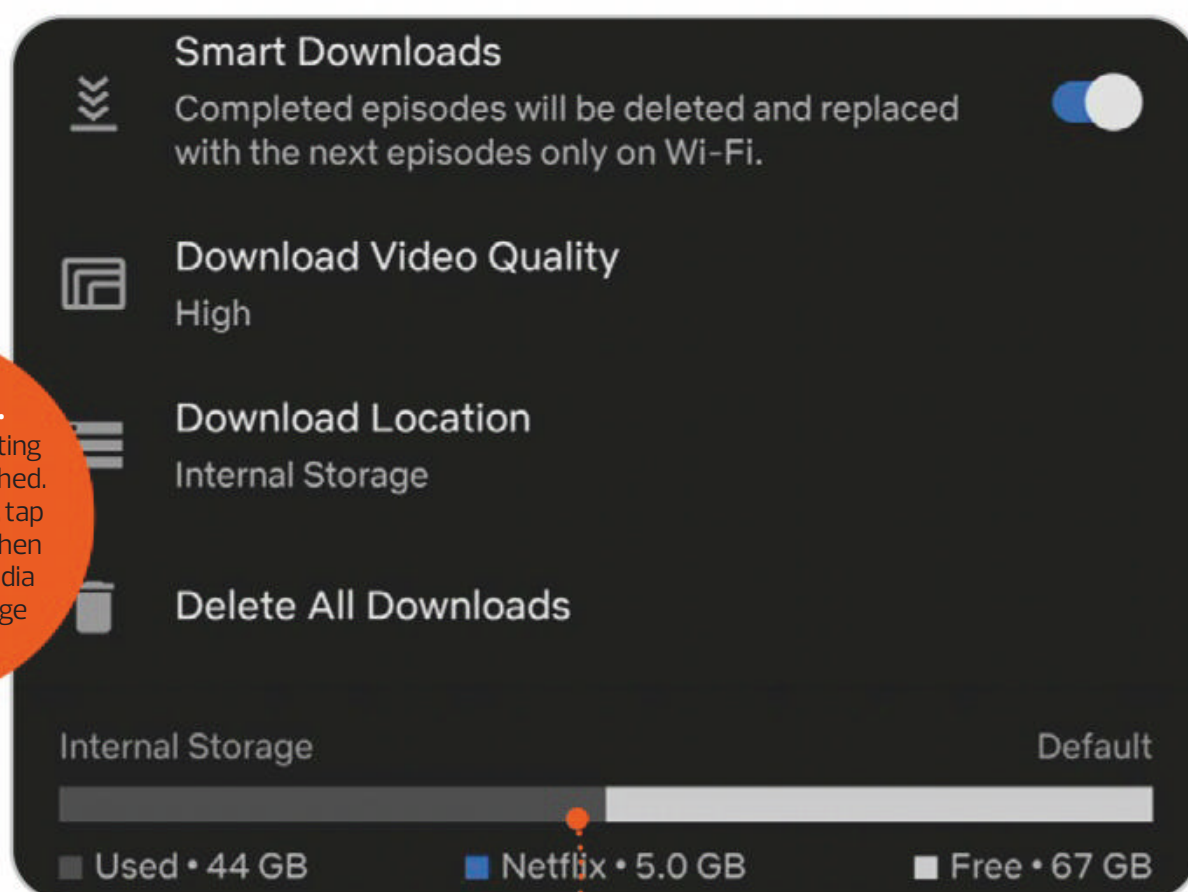
■ Platform diving

You can download Netflix on a range of platforms – basically everything, from early Android

devices (running Android 4.4.2), iOS devices (running iOS 9.0 or later), and even Amazon Fire devices (from Fire OS 4.0) if you're the type to import your tablets. Laptops are also an option – but you'll need Windows 10 version 1607 or later, as well as the latest version of the Windows 10 Netflix app.

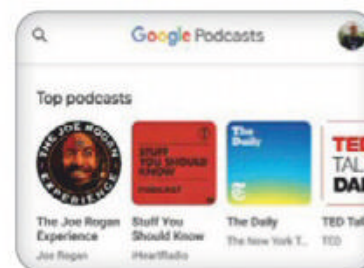
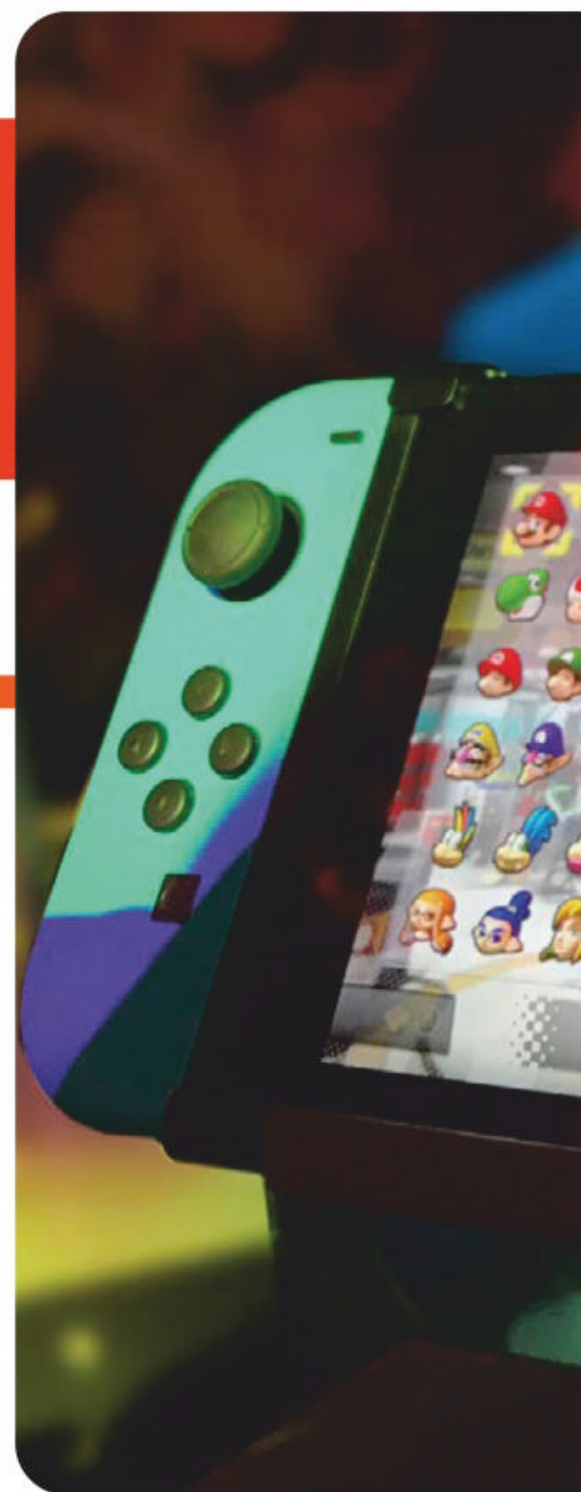
■ Get Smart

If you're watching a series, make sure that your Netflix app has Smart Downloads enabled. It won't matter when you're not connected to WiFi but if you've completed an episode, Netflix will delete it and download the next one in the series. You may plough through everything you downloaded during a shedding episode but Netflix will sort you out for the next time without any further intervention.



Control, Alt...

Make space by deleting movies you've watched. Head to Downloads, tap the pencil icon and then select depleted media files and the garbage can. Done.



HAND OF POD

■ Offline upskill

Podcasts are an amazing way to pass the time. You can use Spotify to access your faves but Google's free Podcasts app (Free/Android, Web) is an excellent choice. If you're a traditionalist download Stitcher (Free/iOS, Android).

■ Going down

In Google Podcasts, you just choose a podcast, select an episode and then tap on the arrow. Download a few more episodes and you're set to shed. You'll only need to pick one episode of Joe Rogan's hugely popular but rather long-winded podcast.



THE THREE AMIGOS

N

NETFLIX

A killer catalogue of original content, a wide selection of movies and series and the ability to download much of it on a mobile device makes Netflix a contender for your attention in the dark. Just remember to renew your downloads prior to an outage.

from R100pm / [netflix.com](https://www.netflix.com)

showmax

SHOWMAX

South Africa's streaming service offers content you can't get anywhere else and you can also download anything available on the service – only to Android and iOS mobile devices, naturally. You're limited to 25 items at a time, but that's enough.

R100pm / [showmax.com](https://www.showmax.com)



YOUTUBE

You don't need to pay to view stuff offline. It takes a lot more curation (because there's a lot more content) but you can save videos from YouTube to watch later. The tricky bit is making sure what you want is available for download.

Free / [youtube.com](https://www.youtube.com)



SWITCH IT UP

■ Nice one Ninty

Nintendo's Switch console was a delight when it was first revealed and it's even more so now. A powerful handheld gaming machine packed with quality games is the perfect way to spend the newly endarkened nights.

■ Feeling Indie

Check out some of the smaller games on Nintendo's online store, especially on the weekends. That's when sales tend to happen and there are some real gems available for almost nothing. *Bastion* and *Transistor* first.

■ Storage wars

Supplement the Switch's storage with a microSD card. Crank it up to 128GB and be aware it still won't be enough. But if you're in the habit of buying online, there will always be something to play.



FEEL THE POWER

■ Stay on top

You'll want to pair a power bank with any of these offline options. Watching video or streaming music, even without a functional internet connection, chews batteries quicker than if you're browsing the internet. Even hungrier? That'd be gaming, son.

■ Full capacity

Opt for a power bank in the 15000mAh to 20000mAh range – if there's more than one device in play then that'll let you top up all of them. Also handy in case Eskom throws a hissy and doesn't turn your power back on right away.



SEEING SPOT(IFY)

■ Going off

If you find a playlist you like, you can download it for later use. And don't worry about artists getting their dues – when your device goes online, the 386 times you played *Achy Breaky Heart* (Grime Rap Mix) will be correctly credited to its creator.

■ Make a plan

Spotify's playlist function will start suggesting tracks as you add to your custom playlists. It's the work of a few minutes to create Songs To Sit In The Dark To, and then a few more to download it so you can actually access it.

TESLANTIS AND BEYOND

The increased pressure on public power plants is proving problematic for people. We're convinced that Elon Musk's Telsa and SpaceX solutions will change the way we consume energy. And we desperately need it now.

N

Now, more than ever, South Africa is in need of a drastic overhaul. Our energy issues aren't going away anytime soon, but the future looks lit if you glance in Tesla's direction.

The power revolution is in full swing, and the world is quickly adopting alternative energy solutions. Not to sound like Greta Thunberg, but South Africa has a long way to go.

As we write this, Eskom's coal and nuclear power systems are failing, and the state-owned power utility is generating more unwanted emissions than ever. This beaten path is littered with coal and tears.

Soak up the sun

In this issue, we cover a bunch of solar products (p46), but the one that you *really* want is the Tesla Solar Glass Roof. It's exactly what it says. Rather than installing solar panels on an existing roof, these bad boys *are* the roof.

The solar roof tiles are made of glass that turn photons into electricity. Musk has also noted

that these come with a 25-year warranty. Which means they might just outlast load shedding schedules in South Africa.

The problem? These aren't readily available in our lovely country yet. What is available, however, is the Tesla Powerwall. But that's gonna cost you. Because going green isn't very attainable or affordable here.

Feed me power

Powerwall is a lithium-ion battery designed specifically for a house. It's prettier than generic deep-cycle batteries and is optimised for backup power. It measures in at 130x86x18cm and weighs 100kg. But (there is always a but) it can cost upwards of R100 000.

The Powerwall II features a built-in inverter, which means you won't necessarily need to install any other hardware. All you need is a Powerwall II and solar. Or not solar. Either is fine depending on your needs.

Do you get why we decided to include this lot?

The Powerwall is ideal for our country – it could store enough power to keep necessities powered up through sessions of load shedding. Yeah, Tesla's alternative energy catalogue is available, but it's not necessarily available to the average South African.

Not near ready

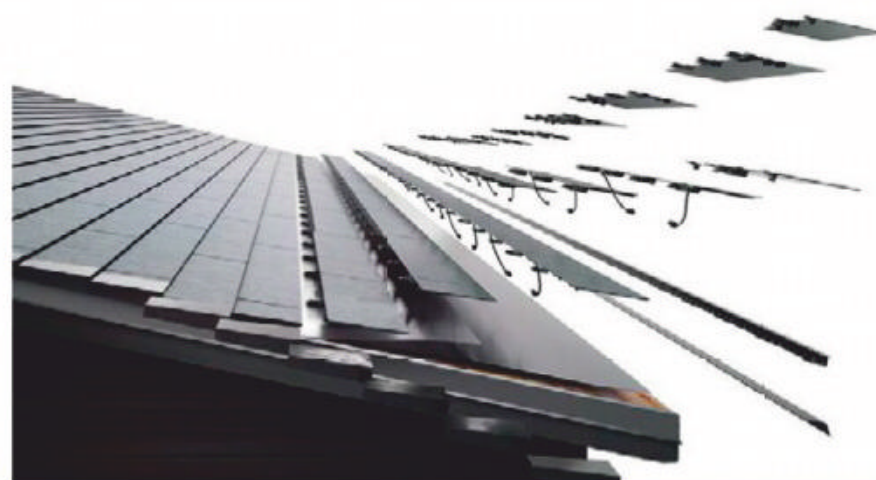
Powerwall became more accessible in SA in December of 2019, when a few local companies became official distributors. Many offer

Tesla Solar Roof

Looks like a normal roof, but costs more and catches electricity from the sun.

Tesla Model 3

Tesla EVs aren't readily available here yet but will complement this setup very well.



Rather than installing solar panels on an existing roof, these bad boys are the roof.

'package deals', that include installation. But we are nowhere near having backup batteries in each house locally.

A lithium-ion deep-cycle battery that matches the power output of our dear Powerwall will cost less than that, but the Tesla Powerwall is optimised for this function. And it won't look like

you're hoarding car batteries in your garage or the backyard.

Expect a massive move towards renewable options as South Africa's electricity grid gets weaker and weaker. We can only wait until viable options become cheaper. In the meantime, give it a shot on a budget (p64) or suffer the consequences.



Tesla Powerwall II

You don't need a solar roof or fancy Tesla roof tiles for the Powerwall II to be of service. Powerwall charges up using grid power (when it's on, **bless**). Once load shedding hits, you'll find the Powerwall can run at least a few devices for a couple of hours. Or even **your** entire house, if needed. Nifty, Innit?

**SEND US
TO MARS IN
THIS...**

Falcon Heavy

At first glance, the most powerful rocket made by man looks rather... we're gonna go with futuristic. The Falcon Heavy is a partially reusable heavy-lift launch vehicle designed and manufactured by SpaceX. This is the shape of future SpaceX launches.



BEAMING DATA FROM SPACE

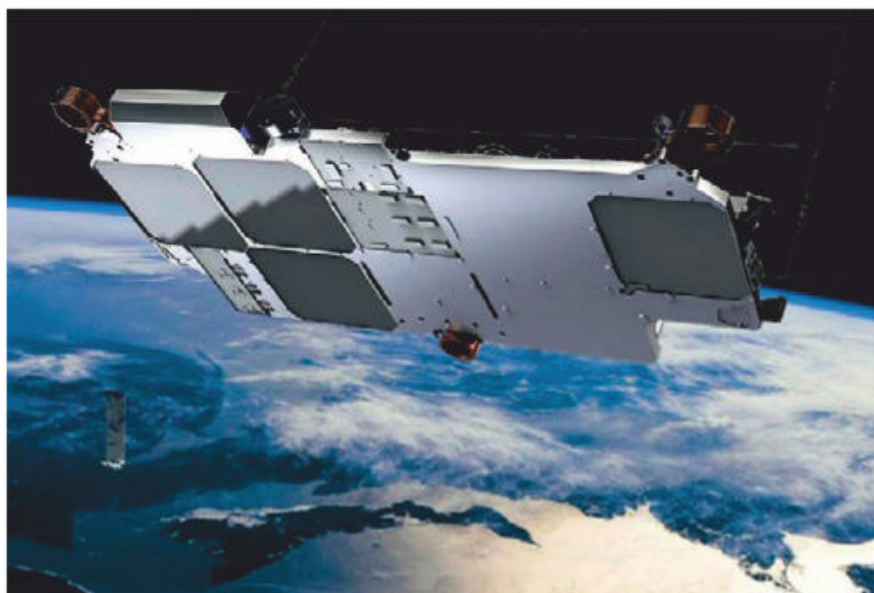
Elon Musk's Starlink project is currently laying the groundwork to beam internet from space. The Starlink constellation already consists of 300 satellites.

When it's all sent up, Starlink will be a satellite constellation of 12 000 satellites that'll form part of a new generation of a low earth orbit (LEO) space communication network. This constellation of LEO satellites will include thousands of small satellites that provide continuous, global coverage.

Initially, they're tested in a lower orbit, after which they're raised to a 550km operational orbit. After that, the service will have the ability to beam internet towards the Earth with little to no latency to any spot on the globe, using a receiver on our end. All we need is this receiver and BOOM. Internet.

Space ISP

Some people tested a simulation of the network, finding that a New York-to-London link will have a round-trip latency of 46msec versus the current undersea cable networks of 76msec.



That's almost like the Flash running over oceans in less than a minute. Is it possible? Maybe.

Should we start getting excited over space internet just yet? As with many disruptive technologies, it may take a while to get to our southern shores... and in-lands.

It looks like Musk desperately wants to start rolling this Link out by mid-2020 in the US. That's now, right? Too bad we're down here in the south end of Africa...

Elon, if you're reading this – we're ready for internet beams from space. For realises.

Dial hard with a vengeance

Olympus's OM-D E-M5 Mark III is finally here, with big smarts and twiddly bits galore crammed into a tiny package

R30 000 / cameraland.co.za

■ Things have really moved on since the OM-D E-M5 Mark II launched in 2015. With Sony and Canon pushing things forward, Olympus was starting to look like Disco Stu at grime night... but the new Mark III packs a lot of tech into a tiny body and serves up images as good as the best of them.

■ This Micro Four-Thirds camera will slip easily into a small bag – it feels light and portable even with a lens on. The only downside: Olympus has used un-premium polycarbonate for the body.

■ Thanks to a host of well-placed manual controls, it's mad easy to handle. On top there's a nice big mode selector with a locking button and two customisable dials for shutter speed, aperture, exposure compensation or other settings. A handy little switch lets you toggle between two modes.

■ The tech stuffed inside this thing is astonishing. It has one of the most effective image stabilisation systems we've used, meaning you can shoot handheld down to 1/4s or even slower with good results, and in murky conditions. And the AF has been upgraded to 121-point phase-detection.

■ Battery life is so-so – Olympus claims 310 shots or an hour of video. There's no built-in flash, but it does come with an external one that can flip and rotate. This does a great job in most situations.

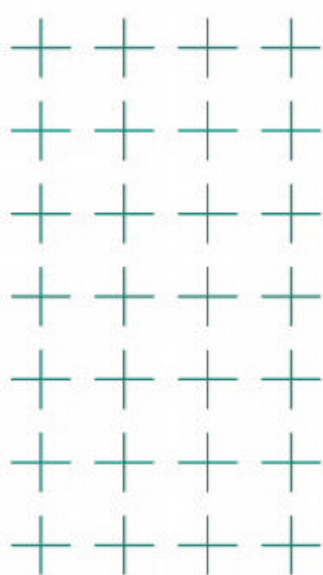
Tech specs

Sensor 20.4MP Micro Four-Thirds
Displays 3in LCD touchscreen, 2.36m-dot OLED EVF
Video 4K/C4K @ 24fps, Full HD @ 30fps
Connectivity Wi-Fi, Bluetooth, SD card, HDMI, USB, 3.5mm mic input
Dimensions 125x85x50mm, 414g



Viddy well

The E-M5's video capabilities have been massively improved, and you now get 4K shooting in true C4K resolution at 24fps.



Flower power

The E-M5 Mark III inherits the 20.4MP sensor and TruePic VIII processor/sensor combo that's also found in the range-topping E-M1X and E-M1 II. Both jpegs and RAW files are impressively sharp and colourful.



Girl power

There are 16 arty filters, and some of them are actually good rather than gimmicky. The only real criticism we have of this camera's shooting skills, in fact, is that it struggles slightly to keep up with fast action.

STUFF SAYS A classic all-rounder that's pretty good at just about everything ★★★★★

This is a very small camera with a very big skillset

The days when Micro Four-Thirds lagged behind bigger sensors are no more, and for the most part the new EM-5 happily keeps pace with its rivals – it's capable of taking fantastic images in the right conditions, with excellent image stabilisation and nimble controls. It's not cheap, but if you're looking for a small system camera that doesn't skimp on the smarts, the OM-D E-M5 Mark III is a fine choice.

Handled messiah

Bose's portable powerhouse is easy to swing around the house... but does it offer serious competition to the Sonos Move?

R8800 / myistore.co.za

■ Gadgets throw new innovations at us all the time, but few things get us as excited as a built-in handle. And it's the fabric-wrapped grip that really gets to the crux of what Bose's Portable Home Speaker is bringing to the crowded Bluetooth audio market: a wireless smart speaker with 360° sound that you can carry around the house.

■ This is, of course, a near-identical pitch to the Sonos Move, and that five-star speaker is a very difficult act to follow. But Sonos can have no more worthy rival than Bose; and we've enjoyed our time with the PHS, as it will now be known.

■ The smooth top part of the aluminium shell contrasts nicely with the grille around the bottom. As with any smart speaker, the top is where the action happens. The buttons sit within an Echo-style light ring that illuminates when updating, responding to a voice command or changing the volume.

■ You can use it as a Bluetooth, AirPlay 2 or Spotify Connect speaker, but to get the full range of features you'll need the Bose Music app. Here you can choose between Alexa and Google Assistant, at which point it works like any smart home speaker.

■ The PHS is a solid all-round mono performer. It does an impressive job of pinging sound in every direction, and both the bass and treble response show real finesse. It's very Bose: accomplished, if not hugely rousing.

Tech specs

Connectivity Wi-Fi, Bluetooth, AirPlay 2, USB-C, Alexa, Google Assistant **Battery life** 12 hours **Water/dust-proofing** IPX4 **Dimensions** 192x119x104mm, 1kg

Here comes the drain again

Bose says the battery will last around 12 hours between charges, and we found this to be pretty much accurate.



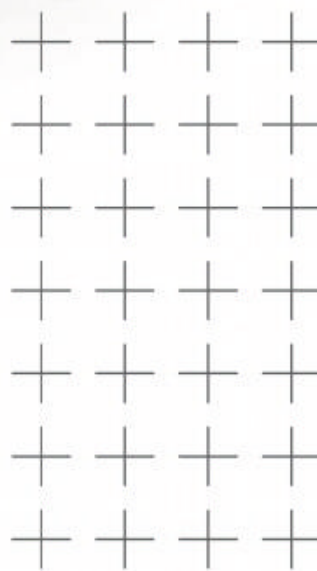
■ We pair a lot

The Bose Music app lets you pair the PHS with other Bose smart speakers. So if you happen to need the loo halfway through an episode of *Noot vir Noot*, you can take the TV's audio with you to sing along with the contestants.



■ Big for your mutes

The speaker sports buttons for on/off/standby and Bluetooth pairing, plus play/pause/volume controls, a voice assistant button and a mute option for the impressively responsive microphone array.



STUFF SAYS Not perfect and not cheap, but feature-packed and easy to like ★★★★★

A classy audio performer with nifty smarts (and a handle)

If you're looking to invest in a high-quality smart speaker that doesn't need to be kept on a leash, there's a lot to admire about Bose's PHS. It looks and sounds good, the smart stuff works as well, and — need we remind you — it has a handle. Sonos's Move still tops this category, but pick up a PHS for just R800 more and we don't think you'll be disappointed.

Last achtung hero

The legendary Toyota badge is back, but wait just a second – is this super Supra a German coupé in Japanese clothing?

from R1million / toyota.co.za

■ While some children of the '90s had Ferrari posters on their walls, wannabe boy racers and Japanese drifters had a Toyota Supra. It's been 21 years since the Supra badge has surfaced, and this reboot seven years in the making has all the styling hallmarks of the legendary coupé... even though underneath it's kind of a BMW Z4.

■ As well as the same platform, you get the same engine, gearbox and sections of the interior. This isn't a basic rebadge, though: Toyota has retuned BMW's three-litre straight six to 335bhp with a rear-wheel drive 0-100km/h time of 4.3 seconds.

■ My, it's fun to drive. The body feels rigid, the car well-balanced and planted. It makes a terribly naughty noise and it's mighty quick; but while all you want to do in the Z4 is pose, in the sexy Supra you simply want to get the hammer down.

■ The cabin is pure BMW. That means material and fitting are top-quality, but you forfeit any Japanese cult coolness. Still, the low driving position makes you feel mean behind the wheel and the seats are pleasingly side-hugging.

■ The infotainment system is brilliant, plus you get 10-speaker audio, sat-nav, a rear camera, electric Alcantara seats, adaptive LED headlights, adaptive suspension, an active differential and cruise control as standard. The head-up display is an optional extra.

Tech specs

Display 9in touchscreen
Connectivity Apple CarPlay, Bluetooth, USB
Engine 3L straight six twin-scroll turbo, 335bhp
Gearbox 8-speed sports auto

Fritz like a glove

Adjustable seat bolsters ensure a bespoke fit every time you get in – so long as you don't gain loads of weight.



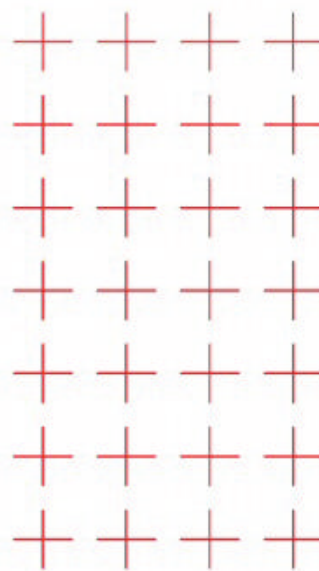
Dash ist gut

There's a 9in touchscreen infotainment system high on the dashboard, with free Apple CarPlay for four years (something BMW charges for). Android Auto users aren't so lucky, but can still use Bluetooth to stream.



Hans across the sea

The car's graphics, USB slots, switchgear, steering wheel and more are all shipped in from Germany. A wireless charger for your phone comes as standard; sadly, the 12-speaker JBL audio system does not.



STUFF SAYS The Supra's Japanese drifter looks can't hide its German roots ★★★★★

It's a fair Klopp: this isn't the real Japanese icon it appears to be

Take one look at the aggressive styling of the new Supra and the warm fuzzy feeling of four-wheeled nostalgia comes flooding back. It's definitely a looker, and on the outside at least, quintessentially Japanese – even if pretty much all of the air intake vents are fake. The balance is just too much in BMW's favour for this to ever be a true Toyota Supra... but that doesn't mean we don't want one.

Straight out of Area 51

The Galaxy A51 is a sleek, elegant and powerful mobile device that does everything you'd want from a mid-range smartphone

from R6 800 / samsung.co.za/za



■ What's amazing about the Samsung Galaxy A51 is just how much value it squeezes into its package. For the price of Samsung's latest mid-range phone you get an awful lot of bang for your buck. With a large display, measuring in at 6.5in, a chunky octa-core CPU and a Mali-G72 MP3, the A51 is deceptively powerful for its relatively cheap price tag.

■ Beyond the raw power squashed into the sleek body, the A51 is fast and snappy even when juggling multiple 'heavy use' apps. With a variable 4GB or 6GB of RAM, it's a speedy machine that never lagged or stalled while in use.

■ Yet, as expected from a mid-range phone, corners had to be cut. Where it's most obvious is the camera which is...serviceable. It's not a bad camera, per se, but it's certainly not as good as Samsung's pricier models. There is a whole bundle of lenses attached to the back, including a 48MP primary, a 12MP ultra-wide, a 5MP macro lens and a 5MP depth sensor.

■ Quantity seems to trump quality in this case as the A51 battles with moving subjects, subpar lighting and the HDR often causes severe wash-out in bright environments. Still, there's a night mode in the mix and the macro cameras do an excellent job at catching finer details at very close ranges.

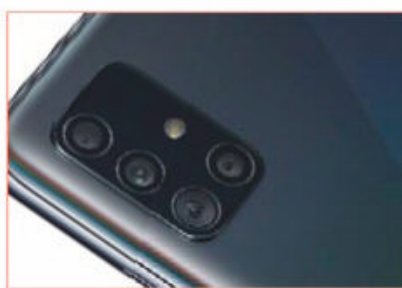
Tech specs

Screen 6.5in FHD+
Processor Octa-core (4x2.3 GHz Cortex-A73 & 4x1.7 GHz Cortex-A53) **RAM** 4GB **Cameras**
Rear 48MP + 12MP + 5MP + 5MP **Front** 32MP **Battery** 4 000mAh
OS Android 10.0 + One UI 2 **Storage** 64GB or 128GB
Dimensions 158.5 x 73.6 x 7.9 mm



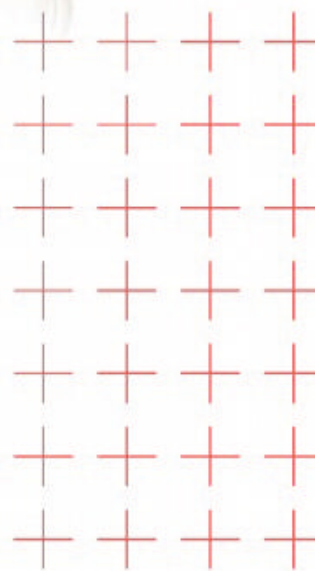
■ Sleek and Sexy

You'd never guess the A51 was a mid-range phone. It looks stunning, with a flat screen rather than Samsung's usual curved screen. The rear prism design is sleek, shiny and, if you hold it at the right angle, iridescent.



■ Marathon Runner

The 4 000mAh battery holds up for extended periods of use. Depending on usage, the A51 should last *at least* a day with an extra bit of charge left over for bedtime browsing. Just don't spend hours on Netflix.



STUFF SAYS You don't have to break the bank for a great Samsung phone. ★★★★★

Major mid-range magician

The Samsung A51 was a real surprise to us. For a very fair asking price, you're getting a device that goes above and beyond. The A51 is a fantastic mid-range phone, arguably the best out there, if you're willing to overlook a disappointing camera. Samsung's efforts have not gone unappreciated because the A51 is a truly fantastic phone that we have no problem recommending to anyone that doesn't want to break the bank on their next upgrade.

Because I got hybrid

Microsoft has stayed true to the Surface Pro formula for its latest 2-in-1... but do better connectivity and more power make the Pro 7 worth the upgrade?

from R24 000 / connecteddevices.co.za

The Surface Pro is back with a revolutionary new design, better screen resolution, epic battery life... well, no, it isn't. But Microsoft's flagship tablet/laptop hybrid does finally have a USB-C port and a gaming-friendly Intel processor.

For a new model launch, Microsoft hasn't done a huge amount here. But while that's terrible for headline writers, it's testament to the success of the Pro 6 – which was an inspired design. And if we can handle endless incremental tweaks from Apple, we can't grumble when the competition follows suit.

For the uninitiated, the Surface is an ultra-thin magnesium alloy tablet with a lovely magnetic keyboard cover. But you'll need to budget an extra R2 500 for that Type Cover – so in reality, to get the true Surface experience you'll need to budget R25 500 or more – and we should point out that our review model is actually specced up to R48 000.



Hy score

This hybrid gets the latest 10th-gen Intel Core processors. Ours has the Core i7-1065G7, which uses Intel's higher-end Iris Plus graphics – ever so nearly enough to push a few games, including the likes of *Grand Theft Auto V* and *Skyrim*, into 'properly playable' territory.

Hy resolution

Microsoft hasn't updated the screen from the Surface Pro 6: it's still a 12.3in IPS LCD (1) that looks extremely sharp thanks to its 2736x1824 resolution. The 3:2 display ratio is better for apps than entertainment, as you're left with huge borders when watching movies in cinema ratio.

Hy time

You get the sense Microsoft didn't feel the need to be too dynamic when speccing up the Surface Pro 7. A USB-C port (2) is really the only external hat-tip to the tech progression we've seen from other makers – and the Pro 6 really should have had one of them already.

GOOD
MEH
EVIL

Really
smart look
and feel

Slick
hybrid
design

At last,
there's a
USB-C port

Battery life
is worse
than before

Type Cover
is a joy
to use...

...but you
pay extra
for it

Hy contrast

A powerful backlight is important for a portable device like this. Colour is excellent, and so are contrast and maximum brightness.

2

Hy-handed

Microsoft has 'done an Apple', asking an extra R2 000 for the Surface Pen (3). But it is filled with tech, like 4096 pressure levels and an eraser. It's a fine stylus, but we noticed some latency when doodling in Paint 3D. You'll want to invest in better software to make the most of it.

Hy maintenance

Oddly, given the usual 'making things better' approach to new tech, the Pro 7 has worse battery stamina than the Pro 6, down to 10.5 hours of normal use from 13.5 hours. And the reality in our testing was even more disappointing, with just 6.5hrs of video streaming.

Tech specs

Display 12.3in 2736x1824 LCD touchscreen **Processor** 10th-gen Intel Core i3/i5/i7 **RAM** 4/8/16GB **Storage** 128/256/512GB/ 1TB SSD **Connectivity** Wi-Fi, Bluetooth, USB-C, USB-A, microSD, Surface Connect **Battery life** Up to 10.5hrs **Dimensions** 292x201x8.5mm, 790g

Hy-end design

The Surface Pro 7 has been built for a slick, flexible, comfortable user experience. Does it deliver?

**■ We shell overcome**

The casing is magnesium alloy, and it's one of the best-feeling pieces of tech made using this kind of metal. Magnesium tends to feel less 'metallic' than aluminium, and this tablet has an almost soft-touch finish. It's stroke-able.

**■ We could be sued**

The whole of the Type Cover, bar the keys and touchpad, is covered in Alcantara, a synthetic suede used in some fancy headphones and some even fancier yachts. It's hard-wearing but has the softer feel of fabric.

**■ We all stand together**

Magnets keep the Type Cover locked onto the screen at a slight upward angle for comfier typing. Without a keyboard, the metal kickstand keeps the Pro 7 upright at any angle you like, from virtually straight up to almost flat.

**■ We can work it out**

In most work situations the Pro 7 is a dream to use. The keyboard is just about stiff enough to make typing feel like a 'proper' laptop, and the keys themselves are excellent. Even the trackpad is alarmingly good.

The Surface Pro 7 is no revelation. Aside from the no-brainer addition of a USB-C port, the only real progress here is down to Intel's new chipsets. We'd like significantly longer battery life – and a lower price would really start to tempt us away from a more conventional laptop – but this hybrid does work perfectly well as a 'real' computer.

STUFF SAYS ★★★★★

It is similar to the last Surface Pro, but this is still one of the few tablet hybrids we'd be happy to work all day on

Being a good Sport

Audi's asking a lot to join their exclusive club. Unlike Scientology, which does the same thing, here you get what you pay for

from R430 400 / audi.co.za

■ Most entry level vehicles have an entry level price. Audi's new starter doesn't have that level of chill – the base model starts at nearly half a bar before you start adding in the more interesting options. Take the price up to just over half a mil. and you'll be pleased that you did.

■ Aggressive styling is part of the package, even if you don't opt for extras. Audi's angular lines make this sportback look fast at rest and even faster when you've got the 1498cc engine humming as you weave through older, slower cars on the highway – just because you can. The future is now, old man.

■ It's not just motor, though. Audi's clocks are all digital, a red-and-white scheme showing performance numbers that'll be slightly distracting unless you're actually, you know, performing at the time. There's also GPS (using MMI navigation), a large touchscreen display with the simplest smartphone setup we've encountered, and a steering wheel you'll battle to keep your hands off to contend with. Also: steering wheel audio controls = heck yeah!

■ For an automatic, the new A1 Sportback is speedy off the mark, even if its sudden lunge forward takes some getting used to. You'll want to rock it in Efficiency mode most of the time, with the odd jump to longer gears in Dynamic mode when you're feeling a little sportier. Show-off.

Tech specs

Engine 1,498cc **Power/torque** 110kW/250Nm **Transmission** 7-speed S tronic **0-100km/h** 7.7sec **Top speed** 220km/h **Fuel consumption (average)** 5.1l/100km **Fuel tank** 40l



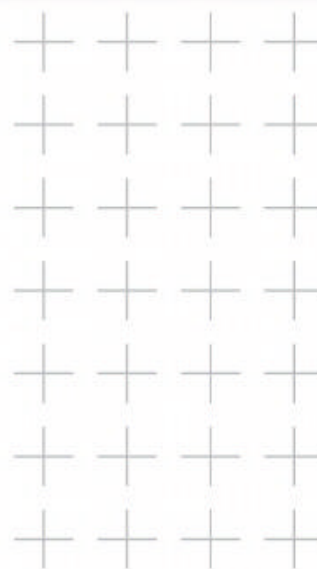
■ Feeling sensor-tive

Nose into a tight parking or get close to the pavement on a narrow road and you'll wonder how you ever did without Audi's sensors. They cover the whole vehicle, with the reverse camera handling the rear.



■ Take a seat over there

Sinking down into the optional bucket seats, you'll feel like a suburban racer in no time flat. It helps that the motor's responsive as heck. The only thing missing to complete the illusion? A helmet and a five-point harness.



STUFF SAYS Audi's about to teach you the difference between *want* and *need* ★★★★★

Adulthood: for a few dollars more

It's not the main price that'll get you – though at R430k, it's going to make a dent. It's the extras. Most of the standout features of our review are optional additions to the base A1. That's the tricky thing about being an adult: when you're shelling out more than four hundred grand for a car, an extra R100 000 doesn't seem like much of a stretch. Particularly when you're getting parking sensors, rear-view assistance, a beefed-up engine and fancier trim.

Wahl watching

Philips' new shaver isn't a shaver, if you believe the hype. Is whatever it is enough to make you ditch your current solution?

from R500 / philips.co.za

Rule of Three
There are three versions of the OneBlade, told apart by the battery life and the number of guards available. The top-end (R900) arrives with four beard lengths and an hour of battery life per charge.



■ We've seen a fair bit of tech that fits on your face in recent years, though it's usually the eyes getting all the attention. Philips' OneBlade turns its attentions a little lower down, to the furry thing living on your chin and/or upper lip. What the heck is that thing, buddy?

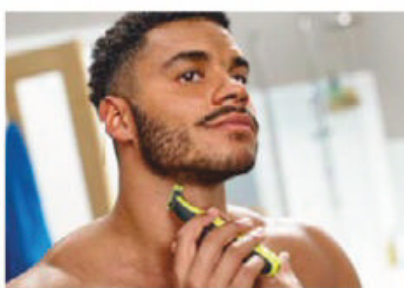
■ Coming across like a miniature Wahl hair clipper, Philips' OneBlade consists of a main power unit and a replaceable blade. Its operation is similar to an electric toothbrush head in that you'll find yourself swapping out usable parts every few months. Every four months, based on two full shaves a day, according to Philips.

■ Plonk the blade against your beard and it'll chew through even the thickest growth, no matter your direction of movement. Use it edge-on and you'll have control over hair length everywhere – even your upper lip, where fuzz tends to enter your mouth when untrimmed. Looking for something fancier in the way of facial hair but aren't keen on paying barber's prices to get it? Time for a little DIY.

■ If you're used to the feel of a razor and, let's be honest, that's what you've been trained to prefer; the OneBlade might seem a little unusual. It doesn't leave your skin completely smooth, ever. It's best used in combination with your old blades, be they of the cheap (or expensive) disposable, electric or straight variety. The shave you get is still rather closer than you'd expect. But without losing the top layer of epidermis.

Tech specs

Run time 45min **Charge time** 8 hours **Battery** Ni-MH **Stubble combs** 1, 3, 5mm **Shave type** wet/dry **Waterproof** Yes



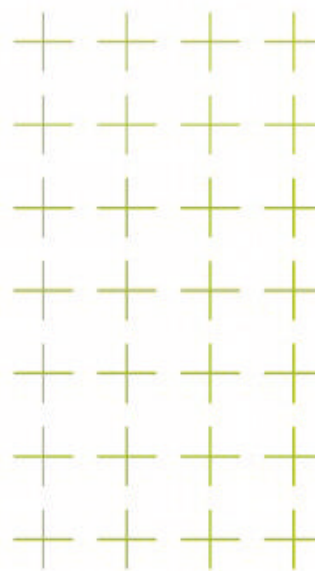
■ Getting in shape

Without the guard, the OneBlade trims and shapes beardy bits with aplomb. Navigating any sensitive areas isn't the best idea but it'll get to work on your facial bits with as little irritation as possible. Goodbye razor burn.



■ A question of length

The OneBlade we tested arrives with three blade guards – in 1mm, 3mm 5mm lengths. The first'll get mighty close to the skin while the last is perfect for maintaining most beards – unless you're a Viking or a hipster.



STUFF SAYS Won't replace a razor but you'd best make space on your shelf ★★★★★☆

Talking about a really close shave

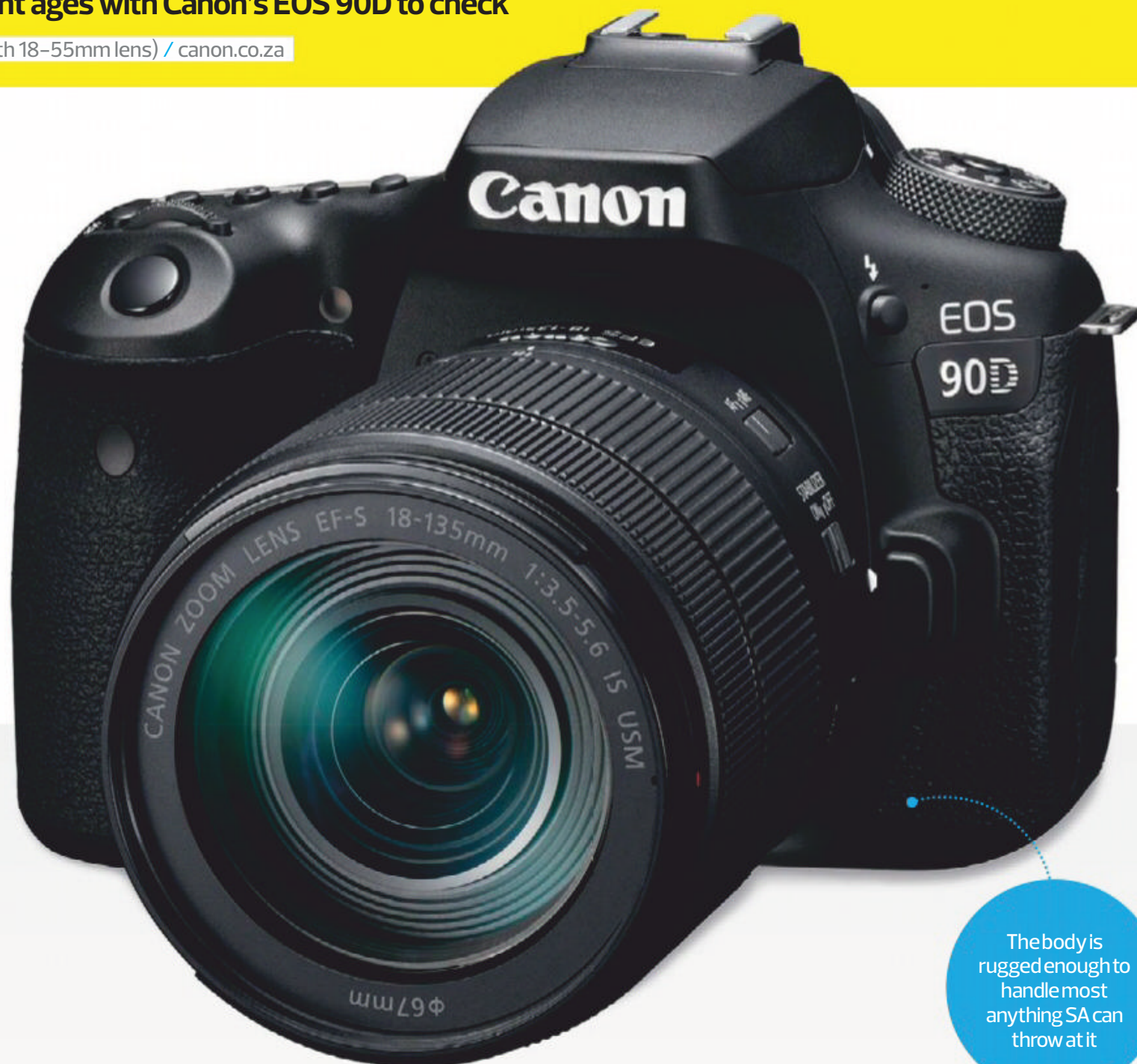
One of the OneBlade's main selling points is that it doesn't shave as close to the skin as a traditional razor – a claim that's accurate. The issue is convincing you that that's a good thing. Going over your face and feeling trace amounts of stubble when you're done feels odd, even if you're looking relatively smooth. But the option to maintain 'designer' stubble for months on end is well worth the lack of perfectly smooth skin.

Shooting your shot

In a mirrorless world, is there much point in rocking a DSLR?

Stuff spent ages with Canon's EOS 90D to check

R20 000 (with 18–55mm lens) / canon.co.za



● DAY 01

Yeah, yeah, everyone's mad excited by the mirrorless evolution. The likes of Fuji and Sony have shaken up the world of cameras that don't live in cellphones but Canon and Nikon are still locked in mortal combat over who makes the best DSLR. Should you care?

Actually, yes. You totally should care. Especially with Canon's EOS 90D rolling around in the market. This shooter enters the market in three flavours: as a

body only (R18 800), with an 18–55mm lens (R20 000) or with a much fancier 18–135mm lens kit (R25 000). On pricing alone this isn't a camera for the totally ham-handed wannabe. In terms of performance and features, though, it's worth the price of admission. You might as well start at the top.

And that's because it's far more user-friendly than the price suggests, while having the hardware to keep journeymen

further along the road to expertise happy. Which is what we'd expect of the replacement to Canon's mighty EOS 80D.

Why care about the 90D in a mirrorless world? Excellent ergonomics, a huge range of high-end features, versatility up the wazoo, and a frankly excellent sensor/image processor combination in Canon's 32.5MP/DIGIC 8 pairing. Translation? Crom says rugged camera take good photos, no matter skill level.

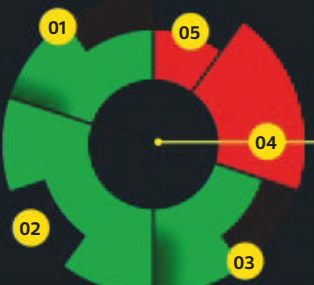
There's the option of using the 3.0in LCD touchscreen as a viewfinder but that's not the default. Canon's optical viewfinder is where you'll get

your Jimmy B. Olsen on, unless you prefer the inferior (but flexible) touchscreen method.

And if you're rocking the optical viewfinder, you can also totally rock the camera itself in one hand. The deeper right-hand grip leaves wrists fresher for longer, while manual settings are all within reach of a questing thumb or forefinger, without leaving users fearing for the 90D's bodily integrity.

Or, if you're just a fan with a bit of cash to burn, you can leave everything set to Auto and let Canon's camera sort everything out while you fiddle with the lens like you know what you're doing.

Excellent ergonomics, a huge range of high-end features, versatility up the wazoo, and a frankly excellent sensor and image processor




Donut of Truth™

01 The flexible screen is mighty useful
02 But you don't need it. Just keep it on your face
03 Bloody bulky battery is brilliant
04 You might catch some flack from the mirrorless chappies... till they see what it can do
05 It lacks a few features – like optical image stabilisation

Tech specs

Sensor 32.5MP APS-C CMOS
ISO range 100–25 600
AF points 45 cross-type
Burst shooting 10fps (OVF), 7fps (LV)
Video 4K (30fps), FHD (120fps), HDR (30fps)
Display 3.0in TFT Clear View II
Dimensions 140.7x104.8x776.8mm, 701g



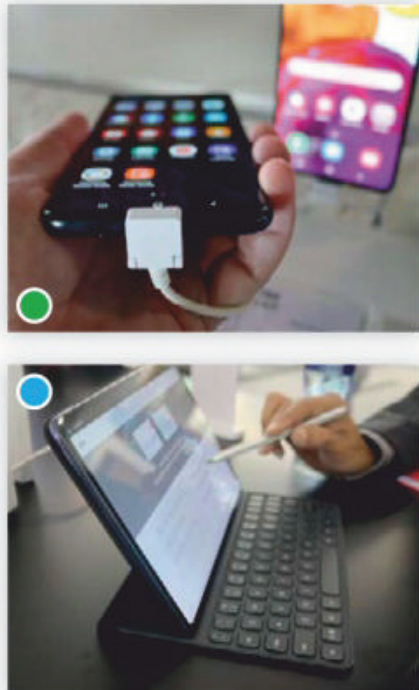
DAY 02

The EOS 90D has spent more time on camera than actually shooting at targets at this point but it's time to change that. We took it on assignment to LG's Johannesburg offices, capturing everything from fast-moving dignitaries to the latest in TV and refrigerator tech. Colour reproduction under miff neon lighting is fantastic and the 45-point autofocus system makes switching targets in a hurry a breeze. We might not have had permission to take those photos and were winging it with the LCD.

Then, a purple-lit fashion show. The EOS 90D showed its high-speed chops, while the flexible display allowed for images from a variety of strange angles while seated in the front row. Firing off bursts of 10 shots from the hip, while sitting down and staring at a perfectly positioned screen made for some excellent images. And some not-so-excellent ones, but that's the point of burst mode.

DAY 07

Spending the afternoon outdoors with the optical viewfinder and a collection of more static targets is relaxing by comparison. Much of our relevant information is visible through the view port, selection



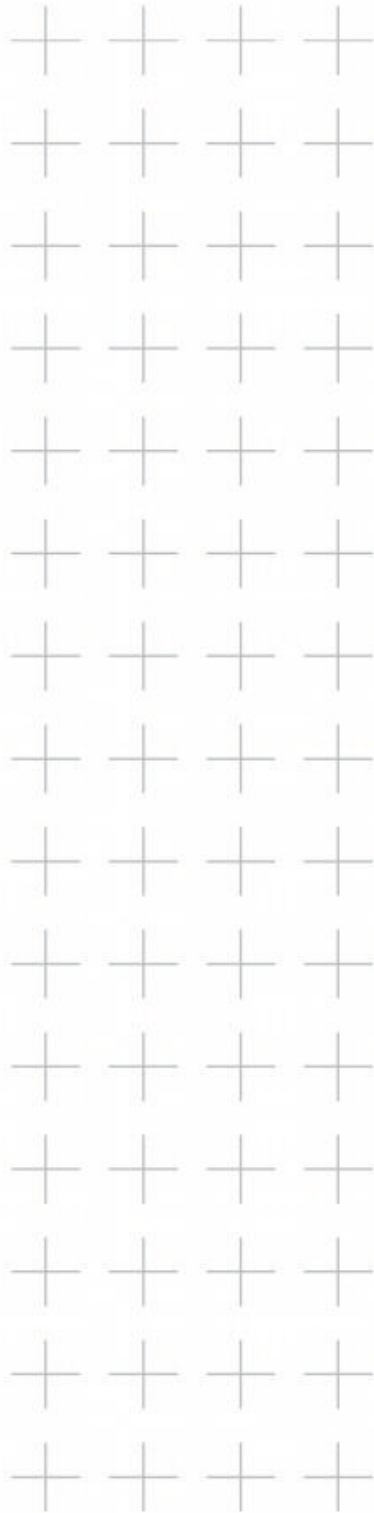
between different target pointers making for some simple shot composition without needing to drop the camera and possibly miss those Egyptian geese chasing the hapless bugger tasked with moving them on to the next field.

DAY 19

We've been using the EOS 90D for everything from product shots for reviews to covering events and goings-on in and around the city. It's excelled in conditions across the board, even without built-in image stabilisation. We've even banged out a few 4K videos, though that chews through the otherwise humongous battery life (and memory card storage) at a prodigious rate. Looks good though and there's an option for a shotgun mic to be connected, if you have one handy.

DAY 28

We'd take Canon's new DSLR anywhere. Not only has it supplanted our usual mirrorless during review but we're a little loathe to go back to it now. And that's just with the 18–55mm lens that it comes with. We'd expect further performance gains if you attach some of Canon's higher-end EF-S glass.



STUFF SAYS

One for the (nearly) pros but smart enough to make newbies look good

★★★★★

INSTANT UPGRADES GOPRO HERO8 BLACK



FIRST ADD
THESE...



ONE GOPRO MEDIA MOD

One of the key differences between the Hero8 and Hero7 is that the latest GoPro is modular, so you can boost its already stellar action-cam capabilities. Pick up the Media Mod for improved audio capture; and if you're buying your cam for vlogging, the Display Mod can even flip the screen so you can watch yourself gurning as you shoot.

R1600 / gopro.com

TWO AUKEY POWER BANK

The Hero8 Black can be hooked up to power while it's shooting, which is a useful feature for non-stop action sessions where one battery won't cut it. Aukey's giant 20,000mAh power bank is a perfect on-the-go charger, using the same USB-C cable as the Hero8. It packs over 10 times the charge of a standard GoPro battery.

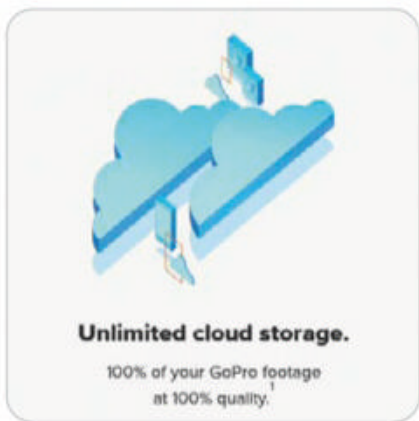
R1300 / takealot.com

THREE GOPRO 3-WAY GRIP/ARM/TRIPOD

Action cams are great at getting everything in frame... and that includes selfie sticks. If you're a vlogger who doesn't fancy sharing centre stage with your equipment, GoPro has a solution: its 3-Way mount. This thing is a grip, an action-friendly bendy selfie stick and a tripod all in one — genius.

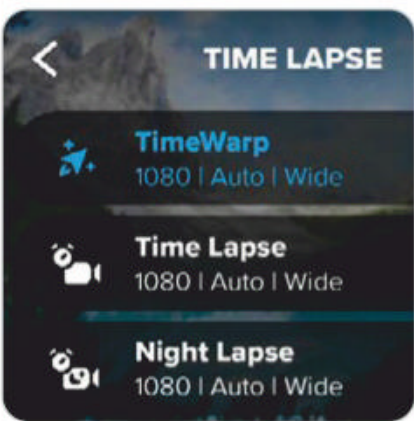
R1400 / capeunionmart.co.za

NOW TRY THIS...



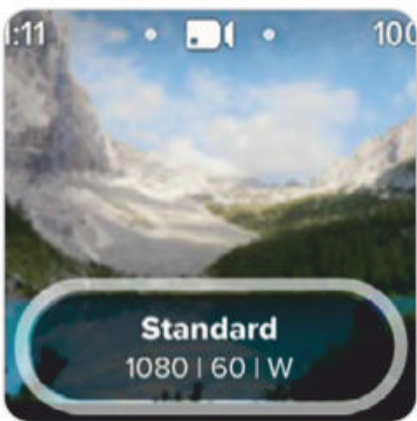
1 GET SOME BACKUP

Unlike older GoPros, the Hero8 Black can be mounted on a helmet, handlebar or bonnet without a separate housing. This versatility means a whole lot of footage which means a few ways video can go missing or be corrupted by an especially sick triple backflip. Keep your clips safe by signing up for GoPro Plus (R100 per month) which includes unlimited cloud backups of your action.



2 DO THE TIMEWARP

TimeWarp 2.0 creates the most dynamic sped-up footage we've ever seen from an action camera. You'll find it by cycling through shooting modes with the power button; select Time Lapse, tap the icon in the bottom centre and pick TimeWarp. Unlike traditional high-paced timelapse footage, GoPro's version adjusts speed based on motion, lighting and scene detection.



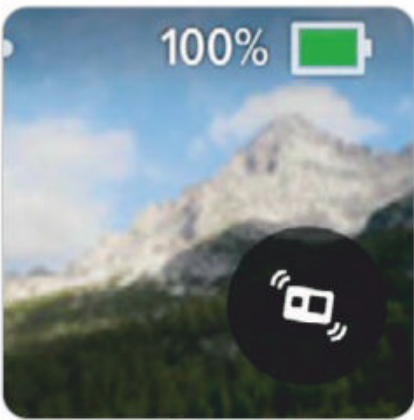
3 KNOW YOUR PRESETS

Spend a bit of time getting comfortable with your GoPro's presets and you can jump to them in the heat of the action, saving critical seconds. To call up the default presets, tap the icon in the bottom centre of the screen when in Time Lapse, Video or Photo mode, then pick the option that best defines what you're capturing. Tap the '+' at the bottom of the presets menu and you can edit them.



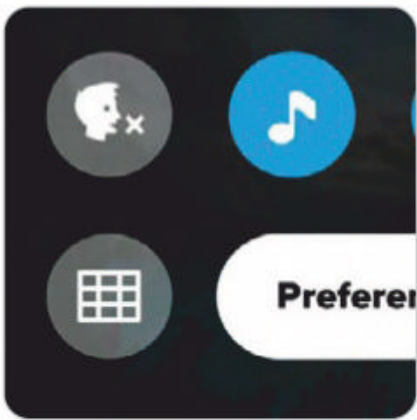
4 USE THE FOUR-CE

The Hero8 Black has 'digital lenses', giving this single cam the power of four. SuperView makes sure all of the action is captured, Wide gives a more natural shot with plenty of detail, Linear captures a distortion-free picture with a flat horizon, and Narrow shoots with the same kind of wide angle you'd expect from a phone. To swap between the four, tap the symbol at the bottom left of the display.



5 GO HYPERSMOOTH

The higher the HyperSmooth level, the tighter the crop. When it's turned off, you'll get wobbly footage but no cropping – use this when shooting on a tripod. Ramp it up to On or High and it will crop into the frame by about 10%. Now fire up Boost and cropping is even tighter... but this only works with 4K video at 30fps, not 60fps. Activate Boost by tapping the 'wobbly camera' icon on the right.



6 SHOUT IT OUT

There's a touchscreen, but what about when your hands are clasping onto a rope as you dangle over a ravine? Start talking and the Hero8 Black will start listening. To activate voice control, pull the menu down from the top of the screen and tap the 'talking head' icon at the top left. For a full list of voice commands dive into the cam's preferences, tap Voice Control, then scroll down and select Commands.

THEN GET THESE...



GOPRO
GoPro's free app is the gateway to uploading footage to your GoPro Plus cloud storage. It also has a remote viewfinder, letting you control the camera from your phone or tablet.
Free



YOUTUBE STUDIO
If you're getting a GoPro to boost your YouTube cred, this app is a must. Upload custom thumbnails, edit tags and descriptions, and set content live.
Free



LIGHTROOM
The GoPro app may be capable, but its photo editor is limited. Seeing as the Hero8 Black can take fine stills, Lightroom is the obvious choice for editing and syncing with Adobe's cloud services.
Free

PS4, XB1, PC / savageplanetgame.com

Journey to the Savage Planet

The clue's in the name: this sci-fi exploration game combines fantastic beasts and mysterious alien landscapes with a certain amount of... well, horribleness

The first creature you meet in *Journey to the Savage Planet* is the Pufferbird. Bouncing about like a bunny rabbit and gazing at you with its big eyes, it's positively precious... right until you boot it to death.

You see, this adorable beast contains a resource needed to craft your pistol – so given the choice of 'cuddle or kill', you'll find somewhat reluctantly letting loose on its beaky little face. But still, by the time you meet the Pufferbird's armoured friends later

in the game, you won't think twice about not only ending them, but using explosives and acid to ensure the job's done right.

It's not all brutality, though. This is an exploration-based adventure that puts you in the boots of an interstellar pioneer tasked with finding a potential new spot for earthlings to squat.

You scan and collect data on the planet's flora and fauna, dig into its many mysteries and continually upgrade your character to hasten your progression. The lure of new

gear and goodies will have you uncovering every nook and cranny of this open-ish world.

But while the promise of a new grappling hook, jetpack upgrade or buff to your pistol will see you shaking every tree and provoking any beast that crosses your path, pimping your intrepid explorer with new toys is only half the fun.

As you add more tools, you're given opportunities to dig deeper into the world, both literally and figuratively. The game riffs on the popular *Metroidvania* formula,

encouraging you to revisit areas that were previously inaccessible. A series of unreachable rocks spied early on in the game, for example, might become a brand new playground once you've got the proper gear.

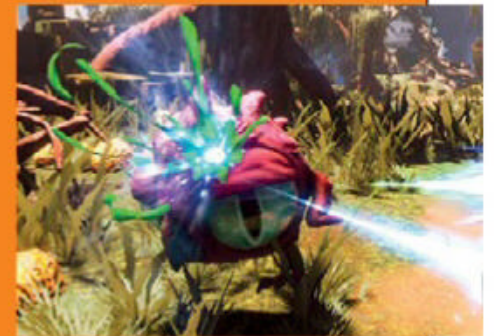
All this makes it an unexpectedly addictive affair, if not necessarily every gamer's cup of tea. Those sticking to the main path might find this budget title a bit too brief, but completionists will find plenty of optional tasks to keep them busy and the ground bloody.

STUFF SAYS A refreshingly unique, personality-packed take on the sci-fi genre ★★★★★☆



It's a strange, frightening, unpredictable realm... like certain parts of Gauteng.

See, this is what happens to brussels sprouts if you don't cook them properly.



Now ad this...

This game world of *Journey to the Savage Planet* is visually stunning. Vibrant, varied, and packed with secrets and surprises, it's a genuine joy to explore. Whether you find yourself navigating a lava cave, picking a bioluminescent flower to light a dark path, or using gooey bait to lure a clueless creature to its death, this world – and the clever ways in which you interact with it – will keep stretching a smile across your face.

And even if seeing a bird shredded by a hungry flower doesn't make you laugh, the game's satirical ads should do the trick. Played on screens back at your grounded spacecraft, the short videos biting skewer consumerism and capitalism with gut-busting results.

Everything from obnoxious in-app purchases to phone sex lines is targeted with sharp wit and imagery. There's really no preparing yourself for the sight of a pulsating blob gurgling sweet nothings into a handset while splayed out on pink satin bedsheets. Mind you, if you're not excited by Meat Buddy, a cuddly companion crafted from reconstituted fat, gristle and beef scraps – “the hottest slimeform in the galaxy” – then you're clearly too desensitised for your own good.



GADGET DOCTOR



ALWAYS ON CALL
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stuff@stuff.co.za

MAIL OF THE MONTH

Q SMART IT UP

I was wondering if you could help me with starting my smart home. I'm looking at everything from smart lights to thermostats. Any suggestions would help.

Giam

A So you've made the decision to automate some home stuff, eh? Well, we've been going through this process ourselves, and there are a few things that'll make your life easier. First, get your hands on a Google Nest or Home Mini. The Home Mini costs around R600.

This can serve as the hub where you control all your other smart tech from – though scaling up to a full Google Home or Nest Hub is a great idea. In terms of lightbulbs – Philips' Hue bulbs as well as Connex Connect bulbs are brilliant. They cost about R200 a pop. Thermostats, especially the smart kind, are harder to come by in SA. The Google Nest thermostat will cost almost R5 000 to import. You'll find some obscure brands of thermostats willing to ship to SA, but if you're looking for local availability, you'll have to wait.

Speak your brains to *Stuff* and you could win!
This letter wins a Google Home Mini worth R1 000.

Q IT'S THE LITTLE THINGS

Sound is an amazing experience and daunting at the same time when trying to make the leap into high-end audio. I love sound and consider as important or more so than motion picture quality.

Stepping into the audiophile world I can only wonder if the investment is warranted. Will I honestly be able to tell the difference between "okay" headphones and a high-end pair. How much better is sound from audiophile headphones when compared to the JBL E65BTNC headset that I currently have?

I am not looking at any one specific purpose, but am after an all-rounder which handles music, movies and gaming.

From what I have researched, DACs and amps drastically improve the sound quality of headphones. Currently, I'm leaning towards the entry-level Beyerdynamic DT990 Pro or Sennheiser equivalent, but my heart is saying the Beyerdynamic DT1990 Pro or Sennheiser HD660s. Whilst these are open-back headphones, they are something I want to try. The only thing holding me back is wondering if it's too bold to go

straight to the upper echelon of headphones. Would the wiser move be to start with an entry-level headphone and train my ears? That way, if I'm not happy, there's less of an investment.

I suppose I am asking if there is any place in Johannesburg where I can test various headphones, DAC and amps and make an educated decision before diving in. I saw on the *Stuff* website you visited the Mitech Direct Experience Store in Midrand. I plan on visiting soon.

Are there other venues in Joburg like this where I can test premium headphones?

Juan Paul

A MiTech has a fantastic showroom. Most any place that sells high-end audio gear will have a place for you to check it out, whether it's headphones or hi-fi equipment. The only exception might be in-ear headphones – you don't really want to test-drive those. Concerning headphone quality, you'll definitely be able to tell the difference between standard kit and the high-end stuff. It's only when you're comparing the best to the (also) best that you might run into difficulty. But if you're jumping from regular garden variety cans to something more premium, your ears will be thanking you for weeks. Last point: The all-rounder phones? Those are a bit of a unicorn but it's mostly down to connection

types. True audiophile gear is traditionally wired and it's difficult to set that up and fully support movies, music and games. It's better to get dedicated cans for each.

Q APPLE HUNTER

My names Alex. I'm 11 years old. I have been reading *Stuff* for the past few months. I have really enjoyed this mag. I have a question (or two). I wanted to ask what the difference is between the iPhone 11Pro and Pro Max. They both have the exact same camera, but the price difference is R2 000. Is it maybe the screen quality or what? I'm also looking for a phone that has a good camera, screen and memory. I'm looking to spend R2 000 to R2 500.

Alex

A The iPhone 11Pro and the 11Pro Max are more or less the same handset. The display and battery are larger on the Pro Max, which is where the price difference comes in. You're literally paying more for the extra 0.7in of screen and the 923mAh of battery capacity.

As for the other question: Check out Nokia's 4.2, 5.1 or 6.1 smartphones. The Nokia 4.2 is the most recent but the 6.1 has a better (single) camera. For best value in the budget line, the R6 000 Nokia 7.2 is very much worth your time as well – though it's more than double your price.

WRITE TO US AND WIN

WIN

Next month's mail of the month wins:
a Google Chromecast and Google Home Mini bundle worth R1 300
courtesy of Circuit City



Stuff

TOP TEN

OF EVERYTHING

This gadget has leapt straight outta testing and into our rankings.

NEW

HOT
BUY

BARGAIN
BUY

UPDATE

Searing with techy genius, a product that's set our hearts aflame.

A solid gold bargain. Worth owning, regardless of cashflow.

Time changes everything, including *Stuff* Top Ten placings.



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TO USE
THEM

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TIPS & TRICKS

- The ultra-wide camera also works for panoramas. Ultra-wide panoramas look more distorted than with the wide lens, but, hey, if you want to do it, you can.
- By default, if you hold your iPhone 11 vertically, the image sensor zooms in to take a 7MP selfie. Tap the expand button on the screen to zoom out for the full 12MP camera.
- Come to the dark side by enabling Dark Mode - Go to Settings > Display & Brightness and toggle the Dark Mode switch.



1

HOT BUY

Apple iPhone 11

from R15 000 / myistore.co.za

A 2019 iPhone with all the internals of its Pro-labelled sibling? Oh hell yeah. There's good reason to have the iPhone 11 on the throne right now — it's powered by Apple's speedy A13 Bionic processor, runs iOS 13 and totes the new U1 chip. Nestled in the new square module around back, you get a wide-angle 12MP main sensor with f/1.8 aperture and a 12MP ultra-wide angle f/2.4 camera. You don't have to go Pro to own a great iPhone this year.

Stuff says ★★★★★

You can't ask for more than a solid iPhone that comes in at a great price



● NOW ADD THIS

UAG Plyo phone case

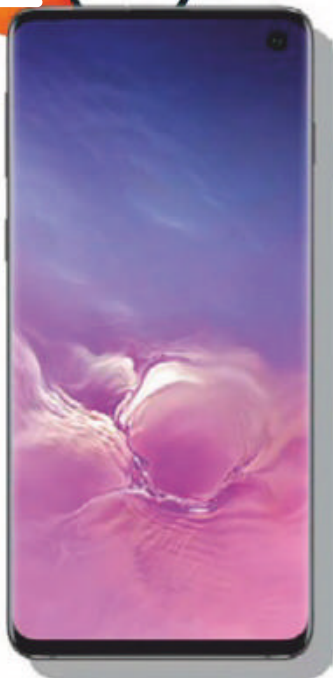
Apple's done its job by making the 11 water-resistant, now keep it safe from drops with a UAG cover.

R580 / gammatek.co.za

● Prices quoted are for handset only unless otherwise stated

2

UPDATE



Samsung Galaxy S10

R17 700 / samsung.com/za

The screen is excellent, the speedy Exynos chipset is assisted by 8GB of RAM and 128 or 512GB of storage. The triple rear camera (12/12/16MP) features 2x optical zoom and an ultrawide option. Samsung proves you don't need all the megapixels to have a great camera.

Stuff says ★★★★★

A brilliant phone that's ideal if you don't want to go Pro/Plus on Android

3

UPDATE



Huawei P30

from R11 000 / huaweistore.co.za

There's a gap between the stock P30 and the P30 Pro. They're both amazing phones, even if you're giving up some features to get a significantly cheaper smartphone. Much of the camera tech remains intact, though, and Huawei's kept the power and style in place as well.

Stuff says ★★★★★

The P30 is priced the way we wish all flagships were – worth every cent

4



Apple iPhone 11 Pro

★★★★★ from R22 000 / myistore.co.za

It's only down here because of the price. Brilliant phone, gorgeous colours, but a bit expensive.

5



Apple iPhone XS

★★★★★ from R15 000 / myistore.co.za

Apple's range is spreading, meaning it occupies the lower slots as well as the top one.

6



Samsung Galaxy S9

★★★★★ from R13 000 / samsung.com/za

The S9 was all small, excellent updates. It still is, but now it's got competition from its own stablemates.

7



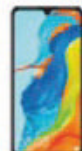
Apple iPhone XR

★★★★★ from R13 000 / myistore.co.za

This 'budget' iPhone still packs a punch, including killer battery life and the best LCD money can buy.

UPDATE

8



Huawei P30 Lite

★★★★★ R5 00 / huaweistore.co.za

Though it's harder to recommend of late, Huawei's budget entry is lifting eyebrows and dropping jaws.

UPDATE

9



LG G8S ThinQ

★★★★☆ from R9 500 / lg.com/za

LGs best-looking handset last year. Add a powerful processor, great camera and display, and you're set.

HOT BUY

10



Nokia 6.1

★★★★☆ from R2 700 / hmdglobal.com

All-new innards, Android One pedigree, and nary a price bump? Is it our birthday, Nokia?

TIPS & TRICKS

- Go dark – save battery (why?) and your eyes (okay...) by hitting Settings > Battery > Darken interface colours.
- Manage those minutes. Pop over to Settings > Digital Balance > Turn screen time management on.
- Dangerously cheesy – Open the camera, then Settings in the top-right. Select Audio Control and then say 'cheese' to take photos.



UPDATE

Huawei P30 Pro

R15 000 / huaweistore.co.za

Just when you thought it was safe to upgrade your phone on contract, Huawei comes along with another sizzler. The P30 Pro may have the best smartphone camera we've ever seen, with 5x optical zoom (thanks, prism!), and up to 50x digital zoom. Because there are four camera sensors there: 40MP, 20MP, 8MP and Huawei's own Time-of-Flight camera. Translation? The best low-light images you'll see from an Android for the foreseeable future.

Stuff says ★★★★★

Still the best bigboi out there, let's see what Samsung can do to top it

● NOW ADD THIS

Huawei Supercharge 10 000 mAh

The P30 Pro's huge battery is no reason not to get it a high-speed power bank of its very own.

R800 / huaweistore.co.za

2



Apple iPhone Pro Max

from R24 000 / myistore.co.za

The iPhone 11Pro Max signifies Apple's best tech of 2019 in its largest chassis. It's got the triple-threat camera setup which includes a telephoto lens, a wide-angle and a main sensor. Is it basically a bigger iPhone 11Pro? Yes. Same insides, different size. Bigger is better, right?

Stuff says ★★★★★

It's worth maxing out your credit card for this iPhone

3

UPDATE



Samsung Galaxy S10+

from R19 000 / samsung.com/za

Samsung ruled the roost two years ago but competition is fiercer than ever. Case in point: Samsung's best phone ever hasn't claimed the top spot. Don't let that put you off. The S10+ is still a beast of a machine, elegantly styled, powerful and with a camera not to be sneezed at.

Stuff says ★★★★★

If you like them big, slick, and stylish, the Galaxy S10+ is the one

4



Huawei Mate 20 Pro

★★★★★ R11 000 / samsung.com/za

While it still supports Google Mobile Services, this is one of the most boss devices out there.

5



Samsung Galaxy Note 10+

★★★★☆ from R17 000 / samsung.com/za

Samsung has pumped up the specs on its excellent phablet, including more S-Pen features.

6



Apple iPhone XS Max

★★★★☆ from R20 000 / myistore.co.za

Apple must do something big to claw its way back. The XS Max proves they're capable of that.

7



Samsung Galaxy Note 9

★★★★☆ from R13 000 / samsung.com/za

Still an excellent purchase if you must have a stylus, even if it's slipped down the ranks a tad.

8



Samsung Galaxy S9+

★★★★☆ R17 300 / samsung.com/za

Off the podium but still a solid choice if you want the best of Samsung and don't need a stylus.

9

HOT BUY



Apple iPhone 8 Plus

★★★★☆ from R12 500 / myistore.co.za

Short stay on the podium notwithstanding, the iPhone 8 Plus is looking cheap vs the XS Max.

10



Honor 8x

★★★★☆ from R4 500 / hi-online.co.za

Our fave budget handset right now holds its own against far pricier ones, and looks the part, too.

1

HOT
BUY

Apple iPad Pro

from R15 000 / myistore.co.za

The latest iPad Pro isn't cheap, but it's a mobile powerhouse like no other, with a diverse and rich app ecosystem, tons of power, a gorgeous screen, and the kind of focus on creativity and productivity that just doesn't exist on other tablets. If you just want to faff on Facebook or Netflix it's massive overkill, but then there's the standard iPad or a slew of other tablets for doing that. Still, even if you don't actually need the new iPad Pro, you're going to want one if you have it in your mitts for five minutes.

Stuff says ★★★★★

Once again Apple blasts ahead of the pack, with a stylish, powerful tablet full of creative potential

1

HOT
BUY

NEW



Xiaomi Mi Box S

R1 300 / cellucity.co.za

Buying a TV box in SA is a hit or miss, as most of them are mass-produced and run on iffy software. Your best bet is opting for a certified Android box, like the Xiaomi Mi Box S. It's the second of its kind, and can stream content in 4K from a variety of services on the market. Already have a smart TV? Just add the Mi Box S to up its streaming game. It's also got Chromecast built-in, with some Assistant chops to improve its desirability. The Play Store offers a variety of apps that should impress any content snob.

Stuff says ★★★★★

Ready to join the Mi too movement? This is by far the best Android box on the market in SA right now

UPDATE

2



Apple iPad Air (2019)

from R9 500 / myistore.co.za

Admit it, you've been waiting for a new iPad Air. An A12 Bionic processor, improved specs across the board and an option of 64GB or 256GB of storage. It's a very good time to be an Apple fan.

Stuff says ★★★★★

Still the best all-purpose iPad for most

NEW

2



Google Chromecast

R550 / takealot.com

The Chromecast is a cheaper option to smart up your TV, and it works seamlessly. Plug-in, play and cast from your mobile device without hassle. Pair it to a Google Nest and gain more control using Google Assistant.

Stuff says ★★★★★

Cast your dreams to the TV

3



Apple iPad 7 (2019)

from R6 000 / myistore.co.za

This is a minor upgrade from its predecessor, but we love the larger 10.2in retina display and, as always, the Pencil support. It's the perfect entry-level iPad for big screen Apple Arcade gaming and streaming sessions.

Stuff says ★★★★★

Our favourite gigantic digital doodling pad

NEW

3



Amazon Fire TV Stick 4K

R1 000 / takealot.com

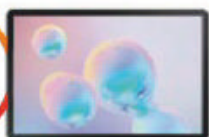
Amazon's latest streaming stick offers 4K plus a faster processor than its predecessor and comes with an Alexa Voice Remote. It doesn't have Showmax, but the selection of third-party apps is excellent.

Stuff says ★★★★★

This is the best stick you can buy

UPDATE

4



Samsung Galaxy Tab S6

★★★★★ R17 400 / samsung.com/za

This is the Android tablet to get if you like doodling or gaming on tablets.

NEW

4



Apple TV 4K

★★★★☆ R3 600 / myistore.co.za

If you're in the Apple ecosystem, might as well cough up for this one. It works. Well.

5



Apple iPad Mini (2019)

★★★★★ from R7 500 / myistore.co.za

Apple's finally updated the mini iPad, with the A12 Bionic chip and a general upgrade.

NEW

5



Ematic 4K Android TV

★★★★☆ R1 200 / takealot.co.za

The Ematic Box can turn just about any display into a smart TV hub.

1

HOT
BUY

UPDATE



LG OLED 65C9PUA

R50 000 / lg.com/za

Replacing its memorable predecessor, last year's C-class OLED gives you LG's most advanced picture and processing tech. It's got the snappy as heck Alpha9 processor. Along with being faster than we can handle, the set looks beautiful in any setting. Even at its thickest point, the 65in C9 measures just 4.7cm. Joining four HDMI 2.1 sockets, the C9 has three USB ports, ethernet, optical and headphone outputs, and aerial and satellite connections. Oh, and it's got 4K output.

Stuff says ★★★★★

As expected, the updated C9 is the closest you'll get to a tiny home cinema

TIPS & TRICKS

- The C9 offers assistant-smarts — choose between LG's own ThinQ, Google Assistant and Amazon Alexa.
- It'll recommend content based on what you've previously watched at certain times throughout the day.



- **NOW ADD THIS Sony PlayStation 4 Pro** You're going to want to use your 4K screen to display 4K bits and the PS4 Pro is going to help you to do that. Best when paired with Sony's PlayStation VR headset (R4 800). R7 000 / playstation.com/za

2



Samsung 55Q8C

R18 000 / hirschs.co.za

Okay, it's still curved and we're kind of past that but Samsung's big screen hits your eyes with a 4K panel toting their neat Quantum Dot tech. It also looks the part, with no bezels and minimalist styling, making sure that this one fades into the background... until you turn it on, that is. Samsung's Q HDR 1500 also helps in that regard.

Stuff says ★★★★★

If you can look past the curve, there's a lot to love here

3



LG 65SM9500PUA

R26 000 / takealot.com

LG can succeed even without OLED. Just look at LG's NanoCell-backed panel for the SM9500PUA, LG could bore you to death with NanoCell marketing fluff, but it really looks beautiful with deep blacks and solid, vivid colours. Get one in 65in and use LG's digital assistant voice control to get lost in a mediocre Netflix series. It's just that good.

Stuff says ★★★★★

You don't need OLED when you look this good

4



LG 65SK9500

★★★★★ from R30 000 / lg.com/za
4K UHD but there's no OLED here. Nano Cell, HDR, and webOS make up for it.

HOT
BUY

5



Hisense 65U8A

★★★★★ R13 000 / hisense.co.za
A huge UHD panel, enough ports to make you feel like a sailor and a price that's kind to the wallet.

6



Samsung 55Q7F

★★★★★ R18 000 / samsung.com/za
Samsung's 4K TV supports HDR and has a price that means you'll still be able to eat at month end.

7



LG OLED 65E8

★★★★☆ R120 200 / lg.com/za
LG's heavy hitter is amazeballs, but the price hits your wallet harder than the pixels pummel pupils.

UPDATE

8



Hisense 75N9700UWG

★★★★☆ R47 000 / hisense.co.za
Hisense lobs Quantum Dot colour tech and a humongous 75in 4K ULED screen at you.

HOT
BUY

9



Skyworth 55G7200

★★★★☆ R8 800 / iskyworth.com
A 55in 4K display for under R10k? For that combo, we'll forgive the user interface missteps.

10



LG 49UK6300PVB

★★★★☆ R7 000 / lg.com/za
UDH and HDR combined in a package designed to make you feel like you spent far more money.

TIPS & TRICKS

Who needs a Touch Bar? You can log into your Mac with your iPhone's Touch ID using the MacID app.

The universal clipboard lets you copy text on your iPhone and paste it directly to your Mac.

1

HOT
BUY

UPDATE

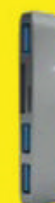
Apple MacBook Pro 2019

from R23 000 (13in) / myistore.co.za

The entry-level MacBook Pro received a noteworthy spec bump last year, and the base 13in variation won't necessarily break the bank. What this also means, is the previous-gen Pro's have received a price cut. Which makes them even more desirable. But the 2019 Pro's now run 8th- and 9th-gen Intel Core processors, and the 15in model packs up to 8-cores. It retains the Touch Bar, Retina Display, Touch ID, some nifty SSDs and the trusty Apple T2 Security Chip. Now if we could just get these a little cheaper, that'd be grand.

Stuff says ★★★★★

A bump in spec is exactly what the best MacBook needed to dominate



● NOW ADD THIS

Satechi Type-C USB 3 Combo Hub

Two ports not enough? This hub adds loads more and sits snugly against the MacBook Pro's side.

R800 / amazon.com

2

UPDATE



Dell XPS 13 (2019)

from R21 000 / dell.co.za

The Dell XPS 13 is one of the best, most consistent Windows laptops in the world. There are no gimmicks, no flimsy parts: every element is top-quality. You get style, portability, performance and great battery life. And every part of it just feels, well, good.

Stuff says ★★★★★

Royalty among Windows laptops: everything about this is top-notch

3



Asus Zenbook UX331UA

from R15 000 / asus.com/za

Asus' new 1.12kg Zenbook 13 might look less like a MacBook than its predecessors did but that's okay. It's not like a Mac inside either, with a Core i7-8550U, 8GB of RAM, 256GB SSD and other metrics that make Apple's machines look slow.

Stuff says ★★★★★

Something this fast shouldn't be this light

4



Apple MacBook Air 13in

★★★★★ from R14 000 / myistore.co.za

As stylish as it ever was, Apple's Air is due for a refresh locally after an international update.

5



MSI GT76 Titan

★★★★★ from R55 000 / evetech.co.za

It packs a punch with at least an RTX 2070 GPU and up to an Intel Core i9 in a weighty chassis.

6



Apple MacBook

★★★★★ from R18 000 / myistore.co.za

It may be about to join the ranks of the obsolete but it's still a top bit of tech.

UPDATE

7



MSI PS63 Modern

★★★★★ from R14 000 / evetech.co.za

Does MSI's multimedia editing-slayer still play games? Yes. Yes, it bloody well does.

UPDATE

8



Huawei MateBook X Pro

★★★★★ from R25 000 / huawei.com/za

A stylish Windows laptop with some clever ideas to get the maximum display for your rand.

9

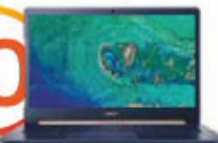


Asus ZenBook Pro 14

★★★★★ R31 500 / asus.com/za

A sizable second screen makes the ZenBook Pro 14 a very unusual proposition indeed.

10



Acer Swift 5

★★★★☆ R20 000 / acer.co.za

Lacks gaming chops but it's light, portable, and powerful enough to make office life lovely.

1

HOT
BUY

UPDATE



Apple Watch Series 5

from R8 000 / myistore.co.za

You want to pay attention, because the new-gen Apple Watch looks pretty much identical to our previous leader. The Watch Series 5 may look familiar, but brings a bunch of cool new features and updated specs to the irrewristable companion. It's now got an always-on display, WatchOS 6 and a speedier processor. It may not sound like much – but we love this watch. Improved health features make the Series 5 brilliant for both healthy and unhealthy folks.

Stuff says ★★★★★

It's more expensive, but we're betting it's totally worth it if you're in it for the health and fitness features

1

HOT
BUY

Garmin Fenix 5

from R9 000 / garmin.co.za

So you're the kind of sporty that makes the seriously fit look at you kinda strange and wonder if you're ever going to slow down, you need the sportiest sportswatch. You're going to need something that tracks all the things. Our fitness champ does everything from swimming to sprinting to... skydiving? Really? Yeah, really. The Fenix 5 is the ultimate sportswatch, so much so that you'll feel you need a degree in sports fitness to understand all the stats. But that's why we love this one.

Stuff says ★★★★★

If you're going to be the sportiest of your pentathlon-beating mates, you're going to want the Fenix 5

2



Samsung Galaxy Watch

R3 500 / samsung.com/za

A sturdy and stylish smartwatch with plenty of power and a truly lovely user interface. Those with an iPhone are still likely to get a better experience and more functionality from an Apple Watch, though.

Stuff says ★★★★★

The best smartwatch for Android users

2



Fitbit Charge 3

R2 300 / fitbit.com

For a broad range of tracking without making your wallet sad, Fitbit's versatile Charge 3 offers up all of the basics, a whack of actual sports smarts, and more than a few bits cribbed from its smartwatch brethren.

Stuff says ★★★★★

The Jonty Rhodes of fitness trackers

3



Garmin Forerunner 945

from R11 100 / garmin.co.za

It's definitely one of the most comprehensive smartwatches out there. The FR945 goes beyond basic tracking, music playback and NFC payments. It's got temperature and altitude acclimation and improved tracking.

Stuff says ★★★★★

Lifting the bar(ometer) for fitness freaks

UPDATE

3



Fitbit Inspire HR

R2 000 / fitbit.com

Fitbit's latest is a great little tracker. As well as step-counting, it's surprisingly capable for proper run-tracking if you go out with a phone. Add notifications and that's just about everything we want in a low-key band.

Stuff says ★★★★★

All the tracking skills that most people need

NEW

4



Garmin Fenix 6

★★★★★ R9 000 / garmin.co.za

The best fitness-orientated smartwatch, offering incredible levels of detail.

UPDATE

4



Fitbit Alta HR

★★★★★ R2 000 / fitbit.com

The slim design, HR monitor, and notifications make this the best discreet wristable.

NEW

5



Fitbit Versa 2

★★★★☆ R4 000 / fitbit.com

The updated Versa brings more features, better tracking and longer battery life.

5



Garmin Vivosmart HR+

★★★★☆ R2 500 / garmin.co.za

A superb tracker packed with features; it's just a little bulky for wearing 24/7.

1

HOT
BUY

Sega Mega Drive Mini

R1 400 / game4u.co.za

There'll be playground spats and online feuds over whether Nintendo's or Sega's games are better, but the Mega Drive Mini wins the miniature retro console war in terms of the faithful recreation of both hardware and software – especially as there are 42 games included. It's taken a long time to get here, but as the saying goes, to be this good takes ages – and the Sega is going to be the must-buy console this year.

Stuff says ★★★★★

Sega's back – and this really is the ultimate mini gaming machine

● NOW ADD THIS

Retro-Bit Official 6-Button Controller

A must for fans of fighting games, this six-button USB pad is also compatible with PCs, Macs and even the Switch. R700 / raru.co.za

● TIPS & TRICKS

- Dip into the display settings to switch from the standard 4:3 aspect ratio to fit your widescreen TV.
- Switch the language settings to Japanese and you can play vastly different versions of games.
- Struggling with the old-school difficulty? Hold down the start button to use one of four save slots.



2



SNES Classic Mini

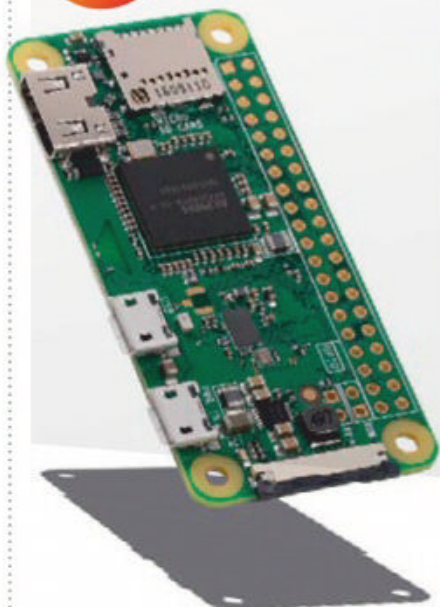
R2 900 / nintendo.co.za

Why splash out over R6 000 on a games console when you can get the SNES Classic Mini for so much less? You get 21 titles pre-installed on this nostalgia-inducing little machine, including the likes of *Super Metroid*, *A Link to the Past* and *Super Mario World*.

Stuff says ★★★★★

Retro-minded Nintendo fans won't find better value anywhere

3



Raspberry Pi Zero W

R250 / pishop.co.za

It might be nearly twice the price of the original Pi Zero, but when you're still getting change from R300 the wireless Pi is fantastic value. Simplicity is key, with no need to mess about with dongles or hubs. This also means your Pi projects can be squeezed into smaller places.

Stuff says ★★★★★

The Pi Zero was already brilliant; wireless add-ons make it better

4



UE Wonderboom 2

★★★★★ R1 500 / takealot.com

A rugged little wonder that'll bring a sonic boost to any occasion.

UPDATE

5



Moov Now

★★★★★ R1 600 / pclinkshop.co.za

The best budget tracker you can buy – gives most Fitbits a run for their money.

6



Amazon Kindle

★★★★★ from R1 600 / circuitcity.co.za

Top of our holiday packing list, the basic Kindle is thinner and lighter than its predecessor.

7



SoundMagic E10C

★★★★★ R600 / sound-magic.co.za

SoundMagic is royalty when it comes to budget buds. For only R600, these are stupendous.

8



Fujifilm Instax Mini 9

★★★★★ R1 100 / fujifilm.co.za

The new Mini 9 keeps the point-and-print charm of its predecessors... and the same film.

UPDATE

9



Ryze Tello

★★★★☆ R1 700 / takealot.com

Rule the skies without breaking the bank with this affordable toy drone.

NEW

10



Google Home Mini

★★★★☆ R800 / takealot.com

Google knows all, even in this garage pie-sized smart speaker. Tell it all your other secrets.

1

HOT
BUY

DJI Mavic Mini

R7 000 / myistore.co.za

The Mavic Mini definitely won't be for everyone. If you want maximum control over your footage, have no qualms about registering your drone, need 4K capture at 60fps, are OK with spending the best part of R20k and consider object-tracking a must-have, you'll want to look elsewhere. If, however, you just want to get a fantastic balance of user experience, features, convenience and quality at a stomachable price, the Mavic Mini is the most accessible premium drone we've used to date.

Stuff says ★★★★★

Dinky drones don't come more feature-packed, and bigger drones than this need to be registered. Win!

1

HOT
BUY

Sony DSC-RX100 V A

R20 000 / premiumbrands.co.za

We wouldn't recommend buying this camera if you already own the old IV model, but a few improvements have ensured Sony remains the top dog in our compacts list – and we're keeping this model above the new RX100 VI simply because of the price difference. It remains one of the finest point-and-shoots we've ever seen, with a flexibility that few pocket cameras can muster. While it's still not exactly cheap, we reckon this is the cam to buy if you want fantastic-looking snaps from your holidays.

Stuff says ★★★★★

A small improvement over the RX100 IV, but this Sony is close to premium point-and-shoot perfection

2



GoPro Hero8 Black

R8 000 / capeunionmart.co.za

GoPro fends off the DJI challenge by giving its latest flagship action cam even better stabilisation skills plus 4K 60fps video, a range of wide angles, waterproofing and fast/slow timelapse capture.

Stuff says ★★★★★

The most stable action cam we've ever used

2



Panasonic Lumix TZ220

R16 700 / panasonic.com/za

This Panasonic compact is a significant upgrade from the TZ110, offering extra reach with the zoom lens, better colour reproduction, and an improved experience when using the electronic viewfinder.

Stuff says ★★★★★

Small, neat and not dramatically overpriced

UPDATE

3



DJI Osmo Action

R5 000 / myistore.co.za

The image stabilisation is sensational and the face-optimised metering makes DJI's action cam an ideal choice for vloggers. It has some idiosyncrasies, but this is a smart shooter that captures great footage without faff.

Stuff says ★★★★★

Despite a few quirks, this is a stellar cam

3



Sony DSC-RX100 VI

R23 700 / premiumbrands.co.za

A true all-rounder that shoots 24fps at full resolution and has stunningly fast autofocus, topped off with a whopping 8x zoom lens that's quite spectacular for such a tiny camera.

Stuff says ★★★★★

A dinky yet luxurious point-and-shoot

UPDATE

4



DJI Mavic 2 Pro

★★★★★ R31 600 / myistore.co.za

Superbly responsive in the air, this is the gold standard in portable flyers.

4



Panasonic Lumix LX100 II

★★★★★ R19 000 / panasonic.com/za

One of the most capable compacts on the market, with superb stills and HD video.

5



DJI Mavic Air

★★★★★ R15 560 / myistore.co.za

A stellar gadget that combines the best bits from the Spark and the Mavic Pro.

5



Fujifilm X100F

★★★★★ R17 600 / myfujifilm.co.za

The best street shooter around if you don't need the flexibility of interchangeable lenses.

1

HOT
BUY

Oculus Quest

from R10 800 / 180by2.co.za

The Quest offers all manner of fully interactive, roamable virtual worlds that you can throw in your backpack without a single wire. That's a mindblowing technical feat. Yes, the battery life is average, but the inside-out tracking and total absence of any cables make this the best all-round VR headset to date. It also ships with the Oculus Touch motion controllers included, which means you can play fully fledged Oculus Rift titles without being anywhere near a PC.

Stuff says ★★★★★

If you've been waiting to board the VR bandwagon, the Quest might be the best reason yet to go for it

1

HOT
BUY

UPDATE



Beat Saber

from R450 / Oculus Quest/Rift, Vive, PSVR

Most VR games equip you for immersive combat, but *Beat Saber*'s dual laser swords aren't meant for slicing and dicing foes. Instead, you'll gleefully swing them to chop blocks that are flung your way to the thumping beat of a song. This game has reinvented the rhythm genre for VR and it is glorious indeed, turning the power fantasy of dual-wielding lightsabers into an exhilarating modern music experience. And add-on packs keep the beat going for longer.

Stuff says ★★★★★

A mesmerising musical melee that's at its absolute best when played on the cable-free Oculus Quest

2



HTC Vive

R12 000 / makro.co.za

Now that prices have levelled out, there isn't much difference between the HTC Vive and Oculus Rift in all honesty. But if you're thinking of upgrading to the Vive Pro in the future, this is a great gateway headset.

Stuff says ★★★★★

A solid choice for immersive virtual reality

2



Superhot VR

R400 / Oculus Rift, Vive, PSVR

There's something really cool about hiding behind a desk before blitzing your opponents with streams of bullets as if you were starring in your very own *Matrix* movie. A wonderfully action-packed title.

Stuff says ★★★★★

A superb 2-in-1 VR puzzler and shooter

UPDATE

3



HTC Vive Pro

R14 000 (headset only) / evetech.co.za

This high-end headset offers the best virtual reality experience by a long way, but its sky-high price means you should only really buy it if you're a VR obsessive with a super-powerful gaming PC.

Stuff says ★★★★★

This hardcore headset is overkill for most

3



Farpoint

R330 (R1 000 with Aim Controller) / PSVR

If it weren't in VR, *Farpoint* would be a distinctly average space-based FPS. But the PSVR headset and Aim Controller lift it above the pack and make it a must-play, not just for VR fans but also for FPS addicts.

Stuff says ★★★★★

Simply a thrilling VR experience

NEW

4

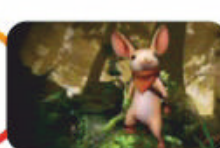


Oculus Go

★★★★☆ R6 800 / takealot.co.za

Go-go dance with the Go on the go. It's cheaper than the Quest, and a standalone headset.

4



Moss

★★★★☆ R470 / PSVR

This platform puzzler offers a one-of-a-kind fable that's perfect for VR.

5



PlayStation VR

★★★★☆ from R5 200 / playstation.com/za

It can deliver incredible experiences, but the PSVR is held back by teething issues.

NEW

5



Star Wars: Vader Immortal

★★★★☆ from R154 / Oculus Quest/Rift

Step into a galaxy far, far away... and yes, swinging a lightsaber is as cool as it sounds.

1

HOT
BUY

UPDATE

Fujifilm X-T3R20 000 (body) / myfujifilm.co.za

It's really hard to find anything bad to say about the X-T3 – it's just consistently great in so many ways. Fuji has looked at virtually every feature on the X-T2 and upgraded it. With substantial tweaks made to the pro-level video options, the high-res EVF, the super-fast autofocus and the burst shooting, what you're left with is an all-round beast of a camera in a small, beautiful form. As APS-C shooters go, it's the best there is.

Stuff says ★★★★★**An incredible stills shooter with video smarts to match****● NOW ADD THIS****Manfrotto 190 Go! Carbon Fibre Tripod**

You no longer have an excuse for wobbly photos with this carbon-fibre tripod. It weighs just 1.65kg.

R4 350 / ormsdirect.co.za**TIPS & TRICKS**

- Pre-shot ES mode starts taking photos and adding them to the buffer as soon as you half-press.
- Sports Finder mode's display enables you to see what's about to come into frame for moving shots.
- Tapping an area on the 3in touchscreen will let you set the focus point or take an instant shot.



2

**Sony A7 III**R37 300 / premiumbrands.co.za

The A7 III manages to pack in a lot of technology and desirability for less than R40k. It's a fantastic all-rounder that's well suited to a bunch of shooting scenarios, coping well with landscapes, portraits, and even a little bit of high-speed sport shooting. As a camera design it's admittedly not the prettiest thing we've ever seen, but it handles well for its compact size.

Stuff says ★★★★★**A fantastic all-rounder that excels in low-light conditions**

3

**Panasonic Lumix G9**R22 200 / panasonic.com/za

The G9 is the best Lumix camera to date and a cracking choice for wildlife or action photography. This diminutive cam's images aren't up with the best, particularly in low light, but the plus sides are lightning shooting speeds and a great system of small, light lenses. With 4K video and handy shooting modes also on board, it's one of most versatile high-end mirrorless cameras you can buy.

Stuff says ★★★★★**The perfect companion for the travelling wildlife photographer**

4

**Sony A6500**

★★★★★ R20 700 (body) / premiumbrands.co.za
A cracking system cam for action photography, but stick with the A6300 if your budget is tight.

5

**Fujifilm X-T30**

★★★★★ R14 000 (body) / myfujifilm.co.za
You get the X-T3's sensor in a cheaper, smaller body with more spare change for buying lenses.

6

**Panasonic GH5S**

★★★★★ R41 000 (body) / panasonic.com/za
A compact system camera that's a pro at video, if slightly disappointing for stills.

BARGAIN
BUY UPDATE

7

**Canon EOS 80D**

★★★★★ R12 700 / canon.co.za
The 80D is so easy to use that even a toddler would get some great shots with it.

8

**Nikon Z6**

★★★★★ R41 000 (body) / nikon.co.za
A top-notch and reasonably sized mirrorless camera from the optical experts.

9

**Nikon D850**

★★★★★ R54 600 (body) / nikon.co.za
This super-cam has enough fantastic features to excel in pretty much any situation.

10

**Fujifilm GFX 50S**

★★★★★ R93 300 / myfujifilm.co.za
It's not cheap, but no camera we've tested takes better photos than this.

1

HOT
BUY

Sony WH-1000XM3

R4 500 / takealot.com

Sony's WH-1000 series was already a top performer, and the WH-1000XM3s make for an even more compelling package. With Bluetooth wireless and great noise-cancellation, they're the ultimate public transport stress killer... well, aside from a chauffeur or a lottery win that lets you retire. The leather pads make them incredibly easy to wear, not unlike sitting in one of those ultra-comfy leather chairs, and most importantly of all the sound quality is fantastic.

Stuff says ★★★★★

Great wireless headphones with effective ANC and a sound that nails just about everything

1

HOT
BUY

Sony WF-1000XM3

R4 000 / takealot.com

The original WF-1000XMs had an easy job in the early days of noise-cancelling in-ears, because there simply wasn't much in the way of competition. That's all changed now – yet the way the XM3s serve up sound quality as spectacular as this while being truly wireless, while effectively cancelling background noise and while remaining comfortable in the ears, is quite something. So, just as it was with the original XMs, it's job done for Sony.

Stuff says ★★★★★

Outright winners on design, build, specifications and, most importantly of all, performance

UPDATE

2



Bowers & Wilkins PX7

R6 500 / takealot.com

B&W's second ANC headphones place greater emphasis on comfort and are all the better for it, while the noise-killing is as effective as you'll find anywhere. Oh, and they sound flipping good too.

Stuff says ★★★★★

B&W takes on the best with top-class cans

2



SoundMagic E10BT

R890 / sound-magic.co.za

The SoundMagic E10BT in-ears are the same as the E10Cs, just sporting a new Bluetooth finish, which means they'll play nice with all those 3.5 jack-less smartphones. Expect a spot of bass, clean treble and detailed mids.

Stuff says ★★★★★

Wireless wired sound for the cable connoisseur

3



Bose NCH 700

R8 800 / makro.co.za

You won't find a better voice pickup system than Bose's, while the company's already exceptional noise-cancelling tech is now even better. Other features, such as the slick touch controls, are also winners.

Stuff says ★★★★★

As all-rounders these are hard to beat

3



Jabra Elite Sport

R3 400 / circuitcity.co.za

For serious in-ear fitness tech, you have to get Jabra's Elite Sport wireless buds. In-ear heart monitoring, up to nine hours of battery life, and a gnarly (and detailed) fitness-focussed app are the highlights here.

Stuff says ★★★★★

The smartest fitness partner you'll ever have

UPDATE

4



B&O H9i

★★★★★ R8 300 / makro.co.za

Frequent flyers and long-range commuters: these are the headphones for you.

UPDATE

4



Apple AirPods Pro

★★★★★ from R4 200 / myistore.co.za

Not really 'Pro', but still excellent wireless in-ears for iPhone users.

BARGAIN
BUY

5



Sennheiser HD 4.50BTNC

★★★★★ R1 900 / mitechdirect.co.za

Priced right, wireless, and with noise cancelling. The catch? No, there's no catch at all.

5



Samsung Galaxy Buds

★★★★★ R2 300 / samsung.com/za

Android's answer to AirPods, the Buds sound great, look subtler, and offer more fit options.

1

HOT
BUY

UPDATE

TIPS & TRICKS

You can control your Move with the touch controls on top, the Sonos app, Google Assistant or Alexa.

Auto Trueplay adapts the Move's sound to different rooms, while the app offers additional EQ tweaks.

**Sonos Move**R7 000 / sonos.co.za

The Sonos range of wireless speakers had been crying out for a battery-powered portable model for ages – and finally our favourite multiroom audio specialist caved in. Luckily, the Move was worth the wait. Its adaptability and sound quality mean it's fine value for money, and a no-brainer for anyone who's already a fan of the brand. Not only is this the speaker Sonos should have launched years ago – it's one of the best products of its type and price that we've heard.

Stuff says ★★★★★

Sonos finally gets up to speed with the portable speaker craze, and in style

Buy this now● **NOW ADD THIS Spotify Premium**

Sick of playing your iTunes library on repeat? Sign up to Spotify for more new music than you could ever possibly listen to.

R60/month / spotify.com

2

HOT
BUY

UPDATE

**UE WonderBoom 2**from R1 500 / takealot.com

This tiny speaker is a delight. It's ideal for the park, or even if you're looking to use one (or two) to supercharge your bedroom setup. Audio quality is ramped up from its predecessor, giving you better bass and more detail, but not at the expense of dinky portability.

Stuff says ★★★★★

A rugged little wonder that'll bring a sonic boost to any occasion

3

HOT
BUY**DreamWave Tremor**from R3 000 / takealot.com

With 50W of thumping audio output, a humongous 20800mAh rechargeable battery that provides up to 18 hours at medium volume (or eight at full tilt), and the most rugged body we've ever seen in a speaker, the Tremor is a real beast of a portable noise maker.

Stuff says ★★★★★

It'll last all day: come rain, snow, sand or being rolled down a hill

4

**UE Megaboom 3**★★★★★ R2 700 / takealot.com

You'll struggle to find a better, longer-lasting or more feature-laden portable Bluetooth speaker.

5

**JBL Xtreme 2**★★★★★ R3 300 / takealot.com

The updated Xtreme offers all the bass for 15-odd hours.

6

**JBL Pulse 3**★★★★★ R3 500 / kloppers.co.za

Pretty pricey, but potent for its size, and the LED light show is utterly mesmerising.

UPDATE

7

**Braven 705**★★★★★ R1 800 / pclinkshop.com

A massive price drop makes the 705 such a bargain it's worth getting two to pair up.

8

**JBL Clip 3**★★★★★ R850 / takealot.com

A pocket-sized party package that delivers pounding performance while being pound-proof.

9

**Fender Newport**★★★★★ from R2 700 / takealot.com

Great battery life, incredible sound and good looks make this amp imitator utterly irresistible.

10

**Marshall Kilburn II**★★★★☆ R5 000 / makro.co.za

The Kilburn II is a speaker with rock-god cred and a 20-hour battery. Weighs 3kg, though.

1

HOT
BUY

PlayStation 4 Pro

from R8 000 / playstation.com/za

As a gaming platform, PlayStation 4 is the best around – which makes the PS4 Pro the best of the best. Games optimised for the new console look stunning on a 4K HDR TV, and are substantially improved by the extra grunt inside this slightly bigger machine. Sure, it can't match the Xbox One X for sheer power or resolution, but it makes up for that with an impressive line-up of games – including *Uncharted 4*, *Horizon Zero Dawn* and *Bloodborne* – and virtual reality support.

Stuff says ★★★★★

The system for console gamers who have a 4K TV and want the best gaming experience possible

UPDATE

2



Nintendo Switch

from R6 740 / store.nintendo.co.za

Nintendo's console earned a promotion in our list after it impressed us with a growing list of fantastic games. Plus, no other device here offers the joy of portable gaming. Long journeys will never be boring again.

Stuff says ★★★★★

This 2-in-1 console is the real deal

UPDATE

3



Microsoft Xbox One X

from R6 000 / xbox.com/za

There's no doubt the Xbox One X is the most powerful console here, capable of producing stunning 4K visuals... but it simply doesn't have the line-up of games to usurp the PS4 Pro from top spot.

Stuff says ★★★★★

A 4K monster held back by its game catalogue

4



Nintendo Switch Lite

★★★★★ from R4 000 / store.nintendo.co.za

Yeah, it's a tiny bit smaller. But it's also cheaper and just as powerful as its big bro.

5



PlayStation 4 Slim

★★★★☆ from R6 000 / playstation.com/za

Haven't got a 4K TV? This is the best way to enjoy PlayStation's brilliant exclusives.

GOT EARS?
THEN CHECK OUT...



YOUR ESSENTIAL AUDIO GUIDE TO WHAT'S HOT IN GADGETS



- BITING COMMENTARY ● BRILLIANT INSIGHTS ● [BAD] JOKES!
- GADGET HANDS-ONS



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www.stuff.co.za/hubs/podcasts-videos/

1

HOT
BUY

UPDATE

Red Dead Redemption 2

from R600 / PS4, Xbox One

Believable characters, a world to lose yourself in, top-class voice acting and a story that intrigues all the way through. Warts and all, with improvements from other games ignored, this is Rockstar at its most arrogant but also its most powerful. *Red Dead Redemption 2* trusts you to explore, to grow, and to let its world seep into your consciousness. This is a special game and one that was entirely worth the wait.

Stuff says ★★★★★

Ultra-addictive gameplay in one of the greatest open worlds ever created

TIPS & TRICKS

- Make sure you talk to strangers more than once – you never know what they'll reveal.
- Regularly brushing and feeding Arthur's horse will increase their bond. It's what all good cowboys should do anyway.

UPDATE

OR PLAY THIS

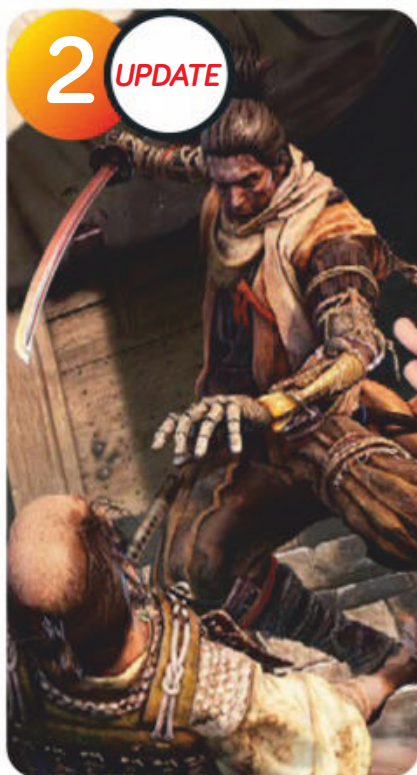
Zelda: Breath of the Wild

If you're after a different kind of open-world experience that's just as expansive and has a lot of heart, this is the one for you.

R1 140 / Switch

2

UPDATE



Sekiro: Shadows Die Twice

from R900 / PS4, Xbox One, PC

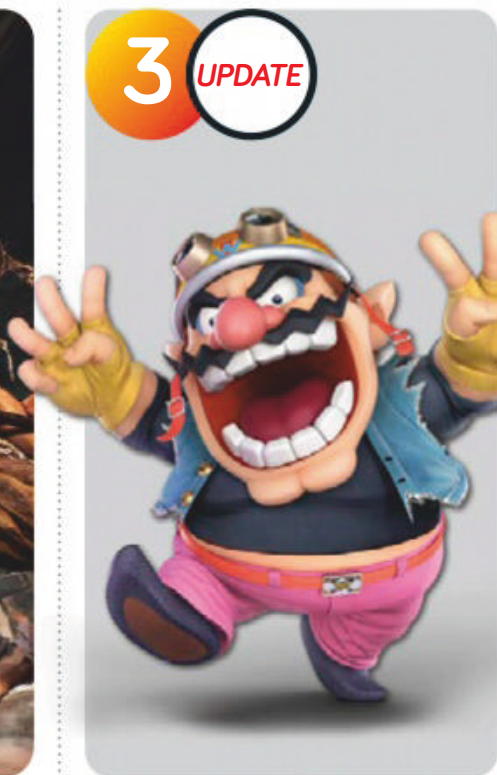
You'll die more than twice guaranteed. This From Software title is still one of the most demanding and exhilarating games of the era. Beautiful graphics paired with a dynamic character makes this one we'll keep in the library.

Stuff says ★★★★★

Your screen may eat a controller from frustration, but it's worth it.

3

UPDATE



Super Smash Bros. Ultimate

R1 140 / Switch

It's no exaggeration to say this is hands-down the best *Smash* game yet. There's just so much going on, with a huge array of fighters – it's a fantastic way to enter into the world of *Smash*, and long-time fans of the series will not be disappointed.

Stuff says ★★★★★

Smash is well and truly back, and it's bigger and better than ever before

4

UPDATE



God of War

★★★★★ R700 / PS4

The epic return of Kratos is yet another phenomenal PS4 offering.

5



Resident Evil 2

★★★★★ from R700 / PS4, Xbox One, PC

Highly polished and much more than just a remake, this is the series' best entry yet.

6



Forza Horizon 4

★★★★★ from R400 / Xbox One, PC

This is a bar-raising sandbox-racing game experience that's worth buckling up for.

7



Fire Emblem: Three Houses

★★★★★ R1 000 / Switch

Crammed with tactical and social depth, this is the best *Fire Emblem* game so far.

8

NEW



Luigi's Mansion 3

★★★★★ R1 000 / Switch

Luigi finally gets a blockbuster hit that would make his brother proud.

9

UPDATE



Gears 5

★★★★★ from R850 / Xbox One, PC

Huge, thrilling and luxurious at every turn – this is absolutely essential.

10

UPDATE



Astral Chain

★★★★★ R950 / Switch

The most stylish and innovative action game you'll play this year.

A lit candle with a bright flame, casting a warm glow. A speech bubble originates from the candle, containing text about the history of candle-making.

Fat of the land

Fat was the predominant substance used for candles in antiquity, with tallow being prized for its cheapness. Whale oils eventually replaced cow and sheep fat, before crystalized plant oils (notably canola and its variants) made the process more...
vegan.

RANDOM ACCESS MEMORIES CIRCA 500BCE

THE CANDLE

H

ang on, hang on, isn't this going a little further back than usual?

Well, what with Eskom blowing those fancy 'lectrics out every other week, we thought it was time to travel to a place when innovation really *meant* something. The humble candle dates back to 500BCE, at the very least, but it's possible that bringing (portable) light to the darkness originated even sooner than that. The ancient Greeks definitely had candles and the invention could date back as far as ancient Egypt. Mankind has been avoiding the darkness an awfully long time.

All right, okay, cool. Why's this here, today?

You saw the cover, right? This is *Stuff's* load shedding issue. South Africa is regularly cast back into the early days of civilization, with a significant majority of the country dependent on this ancient tech innovation. Except our lives are built around electricity so we're hardly self-sufficient. Nowadays we use white candles made from paraffin wax. The material is a byproduct of petroleum manufacture, which means it's basically a limited resource. But at least they're also vegan – unless you're sad about all those dinosaurs that died before man walked the earth.

Oh, so you're being sarcastic, are you?

Oh very. But also serious at the same time. We don't like being plunged into darkness periodically and it's a little weird that the most reliable thing we've got to combat it is a piece of tech from around the time the pyramids were built. But that's strangely the case – a candle doesn't need batteries or a solar panel, it just needs a bit of length and some matches. Boom, instant light. And it'll stay lit as long as you keep it out of the wind, without having to worry about what's coming out of a wall-socket. Oh, and ignore the potential of it burning down your house.

DON'T MISS THE NEXT ISSUE! ON SALE 4 MAY

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Engineered to last longer.
Designed to fit better.



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